TENTATIVE AGENDA - **REVISED**
STATE WATER CONTROL BOARD MEETING
THURSDAY, OCTOBER 16, 2008
AND
FRIDAY, OCTOBER 17, 2008 (if necessary)

House Room C
General Assembly Building
9th & Broad Streets
Richmond, Virginia

Convene – 9:30 a.m. (Both Days)

			TAB
I.	**Minutes (**July 29, 2008)		A
II.	**Permits**		
	American Electric Power Smith Mountain Lake Project VWP	Hassell	B
	Cutalong VWP (Louisa County) [**not before 1:00 p.m.**]	Beasley	C
III.	**Final Regulations**		
	Potable Water Treatment Plant VPDES General Permit	Cosby	E
	Water Quality Management Plan Wasteload Allocation Amendments:	Kennedy	
	Merck WWTP and Frederick-Winchester Service Authority Opequon WRF		F
	New Kent County Parham Landing STP		G
	Virginia Water Protection Permit Program Regulation – Statutory Conformity Amendments	Davis	H
	Water Quality Standards Triennial Review	Pollock	I
IV.	**Proposed Regulations**		
	Discharges of Storm Water Associated with Industrial Activity VPDES General Permit Reissuance	Tuxford	J
V.	**Significant Noncompliance Report**	O'Connell	K
VI.	**Consent Special Orders (VPDES Permit Program)**	O'Connell	L
	Northern Regional Office		
	Leisure Capital Corp. (Louisa Co.)		
	Piedmont Regional Office		
	Ennis Paint, Inc. (Henrico Co.)		
	Richard Haywood dba Shells Unlimited (Gloucester Co.)		
	Tidewater Regional Office		
	Gutterman Iron & Metal Corp. (Norfolk)		
	West Central Regional Office		
	U.S. Army and Alliant Techsystems, Inc. (Radford)		
	Southwest Regional Office		
	Dixon Lumber Co., Inc. (Wythe Co.)		
	Valley Regional Office		
	Town of Elkton (Rockingham Co.)		
	City of Winchester		
VII.	**Consent Special Orders (VWP Permit Program and Others)**	O'Connell	M

	Tidewater Regional Office		
	Dismal Swamp Properties, LLC (Suffolk)		
	City of Newport News		
	Mr. & Mrs. C. Russo (Hampton)		
VIII.	**Consent Special Orders (Oil)**	O'Connell	N
	Valley Regional Office		
	Black Stallion, LLC (Greene Co.)		
	Snow Family, LLC (Greene Co.)		
	Northern Regional Office		
	Baltimore Tank Lines, Inc.		
IX.	**Public Forum**		
X.	**Other Business**		
	Revolving Loan Fund FY09 Funding List	Gills	O
	Division Director's Report	Gilinsky	
	Statewide Alternatives Analysis	Linker	
	Future Meetings (December 3-4, 2008 already set)		

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions arising as to the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for their consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period and one public meeting) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period and one public hearing). Notice of these comment periods is announced in the Virginia Register and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For CASE DECISIONS (issuance and amendment of permits and consent special orders), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. If a public hearing is held, there is a 45-day comment period and one public hearing. If a public hearing is held, a summary of the public comments received is provided to the Board for

their consideration when making the final case decision. Public comment is accepted on consent special orders for 30 days.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who participated in the prior proceeding on the proposal (i.e., those who submitted comments at the public hearing or during the public comment period) are allowed up to 3 minutes to respond to the summary of the prior proceeding presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration. The Board reserves the right to impose reasonable limitations on the presentation of repetitive material.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of this permit. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented during the prior proceeding (i.e., those who commented at the public hearing or during the public comment period) up to 3 minutes to exercise their right to respond to the summary of the public comment period presented to the Board. The Board reserves the right to impose reasonable limitations on the presentation of repetitive material. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

POOLING MINUTES: Those persons who commented during the prior proceeding and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who participated during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. For a regulatory action should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, an additional public comment period may be announced by the Department in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than pending regulatory actions or pending case decisions. Anyone wishing to speak to the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentation to not exceed 3 minutes.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: cmberndt@deq.virginia.gov.

Virginia Water Protection Permit Number 08-0572, Smith Mountain Project, Public Hearing: The Smith Mountain Project (Project) consists of two lakes, Leesville and Smith Mountain, bordering Franklin, Bedford, Pittsylvania and Campbell County. The lakes were formed in 1964 when the Roanoke River was dammed in two locations by Appalachian Power Company (APCO).

Smith Mountain Lake (SML) is the upper lake and has a surface area of 20,600 acres. Leesville Lake is the smaller lower lake and has a surface area of 3,270 acres. The two lakes together impound 400 billion gallons of water. The Project has 536 megawatts (MW) of installed turbine capacity at Smith Mountain Dam and 47.5 MW of installed capacity at Leesville Dam. The Project is utilized as a peaking facility. During off-peak demand periods water is pumped from the lower Leesville Lake for utilization during peak demand periods. This back and forth water transfer can produce a maximum intraday lake level fluctuation of 1.9 feet in SML and 13 feet in Leesville Lake.

The Federal Power Commission issued the original license to APCO in 1960 with an expiration date of March 31, 2010. APCO began working on relicensing in 2003 and after several years of studies filed an application for a new license to the Federal Energy Regulatory Commission (FERC) in March 2008. At the same time, APCO applied to DEQ for a Section 401 Water Quality Certificate. Section 401 of the Clean Water Act requires that any applicant for a federal license for an activity that results in a discharge to navigable waters, present to the licensing agency a certificate from the state in which the discharge originates that certifies that the activity will be in compliance with the State's water quality standards and laws. Conditions in the Section 401 certificate become mandatory conditions of the Federal license. In this case the Federal license is the FERC hydropower license and the discharge in question is the water discharged from the dams through the hydroelectric turbines. In Virginia, issuance of a Virginia Water Protection Permit shall constitute the certification required under § 401 of the Clean Water Act. The Clean Water Act was passed in 1972 so this is the first opportunity that the State has had to condition this project.

In the original license issued by the Federal Power Commission, a minimum release of 650 cfs was required from Leesville Dam to the Staunton River. In a drought such a minimum release would cause SML to fall 5 feet or more before winter and spring high flows would refill the project. When few people lived around the lake such drops were tolerated. As more and more people moved to live on the lake or near the lake, pressure was brought to bear on regulatory agencies to do something about low lake levels during the droughts. APCO estimates that there are 7,400 homes built on SML which are home to 10,500 residents.

The process leading up to this permit decision began in November 2002 with the first meeting between APCO and stakeholders. In 2003 APCO elected to seek the license under a new regulatory procedure called the new Integrated Licensing Process. In 2004 APCO filed the Pre Application Document (PAD) which describes the project location, facilities and operations and its environmental and resource impacts. Public Meetings were held in May and July. In 2005 APCO conducted scoping to determine the issues for studies based on comments on PAD. A study plan was developed. In September 2005 FERC made the determination that the study plan was adequate. Study work groups were formed and were open to whoever wanted to participate.

Public meetings on planning and progress of the studies were held in January 2005, May 2005, March 2006 and September 2007. Individual workgroups meetings were held more frequently. Draft and final study reports were prepared between 2005 and 2007. The subjects of the studies were aquatic weeds and littoral zone habitat, historic resources, debris, drinking water, flood and drought management, navigation, recreation, erosion and sedimentation, entrainment, instream flow needs, the endangered Roanoke Log Perch, water quality, angler use and socioeconomics.

The most important studies for this permit were the instream flow needs study and the drought management study. Work groups for these studies contained representatives from DEQ, the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Tri County Relicensing Committee, Smith Mountain Lake Association and the Roanoke River Basin Advisory Committee. Downstream stakeholders were represented by J.T. Davis, Cole Poindexter, Ted Bennett and Ward Burton, all of whom are riparian landowners and representatives of Dominion Power. Also occasionally attending work group meetings were the Corps of Engineers, the U.S. Fish and Wildlife

Service, the Director of the Western Virginia Water Authority representing municipal water suppliers, representatives of the Smith Mountain Lake Safety Council and representatives of the Smith Mountain Lake Marine Fire Department. The full drought management workgroup met 10 times between March 27, 2007 and February 21, 2008. Subsets of the full group met an additional five times. Work group meetings were assisted by Hydrologics, Inc. which maintained an interactive simulation model from which meeting participants could get immediate feedback on the efficacy of their release proposals.
On March 27, 2008, DEQ received APCO's application for a Virginia Water Protection Permit. DEQ sought and received comments and recommendations from State Agencies and prepared a draft permit. DEQ and APCO came to agreement on the final terms of the draft permit on June 3, 2008 and DEQ gave APCO permission to notice a public hearing on June 10, 2008. A public notice for a hearing was published on July 2, 2008 in the Smith Mountain Eagle and in the Brookneal Union Star.
A public hearing for the proposed issuance of VWP Permit Number 08-0572 was held on August 7, 2008 at Gretna High School. John Thompson served as the hearing officer for the public hearing. Because an estimated 2000 persons were in attendance, the hearing was moved from the auditorium to the football stadium. Approximately 75 persons spoke at the public hearing. A total of 598 written comments were received during the comment period.
Major features of the draft permit: The draft permit memorializes an instream release protocol known as HL-8 (with HL standing for Hydrologics, the consulting firm that developed the model for APCO with input from the stakeholders groups). The important components of the draft permit are as follows:

- A phased approach is presented: as a drought worsens, the minimum releases are reduced, instead of having a single minimum release which was a feature of the last license.
- A time of year sensitive minimum release: streamflow naturally drops in the summer and fall, and rises in the winter and spring; therefore the target flows for aquatic life in the permit reflect these natural cycles.
- A probabilistic approach to setting minimum releases: the model uses an algorithm that takes into account inflow, the present storage condition, the time of year and the prospects of future inflows based upon the streamflow records of the past, and sets the minimum releases accordingly.
- An approach that takes into account the timing of recreation: under drought conditions minimal recreation flows are only provided on weekends between Memorial Day and Labor Day. In trigger 2 drought conditions minimal recreation flow is provided for only 12 hours during daylight on Saturdays. No recreation flows are specified outside of these times.
- An approach which takes into account the flows of tributaries below Leesville Dam: If Goose Creek and Big Otter Creek are running strong, releases from Leesville Dam will be reduced in order to conserve water in the lake while still meeting instream flow targets for aquatic life downstream.
- Adaptive management: the permit features a condition that allows DEQ to grant a variance if Trigger 3 activates. The draft permit requires that the permittee hold a public meeting on the performance of the operating protocol in protecting lake levels and instream beneficial uses five years after the protocol is implemented and report back to DEQ with any recommendations for modification.

Based on the comments received, staff will recommend that the following changes be made to the draft permit.
1) Modify Trigger 3. As currently written it activates only under the worst drought conditions after December 1st and only if there is a 2% chance that the project would drop to 790 feet adjusted anytime within the next 10 weeks. We recommend that Trigger 3 also activate whenever the project drops to 791 feet adjusted, regardless of the time of year or probability of falling to 790 feet adjusted. We also will fix the typographical in this condition.
2) Add a condition that requires APCO to build up the spring surcharge by April 15th of each year, to the extent that inflows allow. A standard practice has been to fill up Smith Mountain Lake and then fill and hold an extra 2 billion gallons of water in Leesville Lake above its normal level every spring. This extra water, called the spring surcharge is used to meet the higher flow requirements for Striped Bass Spawning. The draft permit did not mention this standard practice. Based on the record to date, inflows

would allow the building of a surcharge in almost every year, with the possible exception of major drought years such as 1931 and 2002.

3) Make three changes to the proposed flowby rule condition, now condition D.6.

a. Add a condition that allows APCO to switch from the higher May minimum instream flow targets to the lower June targets as soon as DGIF determines that the striped bass have finished spawning. This is needed because the spawn sometimes ends before June 1. DGIF operates a hatchery at Brookneal and they are in communication with AEP every spring on the status of the spawn.

b. Add a condition that requires APCO to provide flow for river recreation not just on Saturdays and Sundays in the summer, but also on Memorial Day, the Fourth of July and Labor Day.

c. Add caps on the amount of water that APCO has to release to meet the downstream target flows. The minimum release would become a range in the months that caps apply. This will allow for the minimum release to be in the bottom of the range when downstream contributing tributaries are flowing stronger and in the higher end of the range when downstream flow is weak. The caps are applied in the critical months of June through November when we are trying for recreation reasons to maintain the lake at a reasonably high level. The caps are set between 80 and 200 cfs below the target at Brookneal and vary by month. If the contributing drainage area below the dam is not producing the 80 to 200 cfs of flow, then storage in the Project will not be required to reach the target.

4) Add a condition that requires APCO to monitor erosion downstream of Leesville dam and prepare a corrective action plan if project fluctuations are causing continued and excessive erosion.

Attachment 1

VWP Individual Permit No. 08-0572

Part I - Special Conditions

A. *Authorized Activities*

This permit authorizes the following impacts as indicated in the application dated March 25, 2008, received by DEQ on March 27, 2008, and deemed complete by DEQ on May 2, 2008. The permit authorization and conditions are also based on additional submittals approved by DEQ.

1. The discharge of water from Leesville Lake to the Staunton River for the production of hydroelectricity**.**
2. The discharge of water from Smith Mountain Lake to Leesville Lake for the production of hydroelectricity.
3. The discharge of pumped water from Leesville Lake to Smith Mountain Lake for the purpose of storing the potential energy of the pumped water.

B. *Permit Term*

This permit is valid for 15 years from the effective date.

C. *Standard Project Conditions*

1. The activities authorized by this permit shall be executed in such a manner that any impacts to stream beneficial uses are minimized. As defined in § 62.1-10(b) of the Code, "beneficial use" means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural, electric power generation, commercial, and industrial uses. Public water supply uses for human consumption shall be considered the highest priority.
2. Flows downstream of the project area shall be maintained to protect all uses.
3. Measures shall be employed at all times to prevent and contain spills of fuels, lubricants, or other pollutants into surface waters.
4. Virginia Water Quality Standards shall not be violated in any surface waters as a result of the project activities.

5. All required notifications and submittals shall be submitted to the DEQ office stated below, to the attention of the VWP permit manager, unless directed in writing by DEQ subsequent to the issuance of this permit:
   Department of Environmental Quality
   Office of Wetlands and Water Protection
   P. O. Box 1105
   Richmond, VA 23218
6. All reports required by this permit and other information requested by DEQ shall be signed by the permittee or a person acting in the permittee's behalf, with the authority to bind the permittee. A person is a duly authorized representative only if *both* criteria below are met. If a representative authorization is no longer valid because of a change in responsibility for the overall operation of the facility, a new authorization shall be immediately submitted to DEQ.
   a. The authorization is made in writing by the permittee.
   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
7. All submittals shall contain the following signed certification statement:
   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
8. Any fish kills or spills of fuels or oils into Smith Mountain Lake by the permittee shall be reported to DEQ immediately upon discovery to the West Central Regional Office Pollution Response Program at (540) 562-6723. Any fish kills or spills of fuels or oils by the permittee into Leesville Lake or the Staunton River shall be reported to DEQ immediately upon discovery to the South Central Regional Office Pollution Response Program at (434) 582-6236. If DEQ cannot be reached, the spill shall be reported to the Virginia Department of Emergency Management (DEM) at 1-800-468-8892 or the National Response Center (NRC) at 1-800-424-8802
9. The permittee shall notify DEQ of any additional impacts to surface waters, including wetlands; of any modifications to the discharge works; and of any change to the type of surface water impacts associated with this project. Any additional impacts, modifications, or changes shall be subject to individual permit review and/or modification of this permit.

D. *Instream Flow Conditions*

1. The following instream flow conditions become effective upon issuance of a new Federal Energy Regulatory Commission License to Appalachian Power Company for FERC project P-2210.
2. The minimum release from Leesville Lake shall not be less than 375 cubic feet per second in terms of average hourly flow from November 1st through February 29th and 400 cfs in terms of average hourly flow from March 1st through October 31st.
3. During periods when the required discharge is less than one generating unit's discharge, a generating unit at Leesville Lake shall be operated on an hourly auto-cycle basis to provide the required flow. In case the generating units are out of service, the release may be made from a spillway gate.

The permittee shall run a forecast based simulation model at least once every three days and evaluate the probability of being at a certain elevation into the future. Trigger 1 will activate

when there is a 20% chance of dropping below 790.5' (adjusted) in 16 weeks. Trigger 2 will activate when there is a 2% chance of dropping below 790' (adjusted) in 10 weeks. Trigger 3 will activate if Trigger 2 is in effect and the reservoir is less than 795' (adjusted) between December 1 and March 31, or anytime the adjusted elevation drops below 791.0' regardless of the month. All triggers are lifted if the elevation has reached 795'(adjusted) and there is less than a 2% chance of dropping below 790.5' (adjusted) sixteen weeks from that time.

4. To the extent that inflows allow, the permittee shall store additional water in Leesville Lake so that the adjusted storage shall be equal to 795.3 feet adjusted by April 15th of each year. The extra 0.3 feet of storage is intended to be used to ensure the success of the striped bass spawning run and need not be retained past the end of that run unless the permittee chooses to do so, while still complying with minimum instream flowby requirements.
5. The permittee shall release water at Leesville in an attempt to meet the target flows listed in the table below. Target flows are measured at the Brookneal gage, USGS number 02062500 and expressed in units of cubic feet per second. The permittee shall estimate tributary flows between Leesville and Brookneal when running the forecast based model and use such estimates in determining releases from Leesville when attempting to meet the target flows at Brookneal.

	Normal	Trigger 1	Trigger 2	Trigger 3
January	1100	990	990	770
February	1100	990	990	770
March	1100	935	825	770
April	1500	1275	1200	1050
May	1500[4]	1275	1200	1050
June	900 [1,5]	765 [2,6]	765 [3,6]	630
July	700 [1]	595 [2,7]	560 [3,7]	490
August	See note 1	570 [2,7]	570 [3,7]	420
September	550	550[7]	550[7]	385
October	600	570[7]	570[7]	420
November	700	595[7]	560[7]	490
December	800	720	720	560

Notes:

1. Minimum release at Leesville of 650 cfs, in terms of an average hourly flow.
2. The minimum release of 650 cfs at Leesville will be made on Saturdays and Sundays and on Memorial Day, July 4th and on Labor Day for recreation. Appalachian shall time the release in an attempt to make it arrive at Long Island at 8 AM on Saturday and to subside at Brookneal at 8 PM on Sunday
3. A minimum release of 650 cfs will be made at Leesville for 12 hours timed to arrive at approximately sunrise at Long Island on Saturdays and on July 4th and on Labor Day.
4. Upon notification by the Department of Game and Inland Fisheries that Striped Bass spawning is complete, the permittee may reduce releases and only be required to make release for the June normal target flow of 900 cfs
5. The maximum release that the permittee is required to release in attempting to hit the target flow at Brookneal is 700 cfs.
6. The maximum release that the permittee is required to release in attempting to hit the target flow at Brookneal is 650 cfs
7. The maximum release that the permittee is required to release in attempting to hit the target flow at Brookneal is 480 cfs

E. *Adaptive Management*

1 If required by operating emergencies beyond the control of the permittee, and/or when Trigger 3 events occur during drought and/or low inflow conditions, flows can be temporarily modified from those described in Section D upon mutual agreement between the licensee and

DEQ, in consultation with the Virginia Department of Game and Inland Fisheries, following appropriate public input as determined by DEQ.

2. Within five years after the date that the instream flow conditions become effective, the permittee shall hold a public meeting in the vicinity of the project and accept comments on the performance of the project in maintaining lake levels and in providing flows necessary to protect instream beneficial uses. The permittee shall summarize the comments and provide them to DEQ along with any recommendations that the permittee might have. DEQ may, at its discretion, and depending on the comments, elect to exercise its right to reopen the permit pursuant to State Law and Regulation.

F. *Dissolved Oxygen Conditions, Monitoring and Reporting*

1. The permittee shall operate the turbines at Smith Mountain Dam from July1st through September 30th in a fashion that will minimize or eliminate violations of water quality standards for dissolved oxygen in the tail waters below Smith Mountain Dam. During this time period, the permittee will dispatch the turbines with intakes that are highest in the water column first and take those turbines off line last when generating.
2. Within 120 days of the effective date of the permit, the permit shall provide for DEQ approval a monitoring plan designed to determine the timing and extent of potential contraventions of the water quality standards for dissolved oxygen in Leesville Lake caused by late summer and fall hydroelectric generation from discharges from Smith Mountain Lake. The monitoring plan shall include but not be limited to the location of monitoring stations and the frequency of monitoring.
3. Within five years of the effective date of this permit, the permittee shall provide DEQ a report on Summer and Fall Dissolved Oxygen Monitoring in Leesville Lake during Generation at Smith Mountain Dam. The report shall summarize the effects of generation on Leesville lake dissolved oxygen levels.
4. If the first on, last off generation practices required by condition F.1, are not successful in eliminating dissolved oxygen contraventions of water quality standards caused by turbine discharge, the permittee shall submit a feasibility study and plan for physical or mechanical alterations of water release procedures that will eliminate violations of water quality standards for dissolved oxygen caused by turbine discharge from Smith Mountain Lake. The feasibility study will be due by December 31, 2015 unless the operational changes alone are sufficient to eliminate contraventions of the dissolved oxygen standard.

G. *Instream Flow Monitoring and Reporting Conditions*

1. The permittee shall monitor on a daily basis, adjusted storage levels in the project lakes, inflow to the project, downstream side flows between Leesville Dam and Brookneal and releases from the project to the Staunton River.
2. The permittee shall file an annual report with DEQ that tabulates by date, the status of the project in terms of the trigger condition in effect, the adjusted elevation, the mean daily release at Leesville and the target flow required by the table in condition D.5. The report shall be submitted by January 31st for the previous calendar year.

H. Erosion Monitoring, Reporting and Mitigation below Leesville Dam

The permittee shall conduct an erosion monitoring program below Leesville Dam. The purpose of the monitoring program is to determine whether the auto-cycling of discharges is continued causing excessive erosion along the banks of the Staunton River within five miles downstream of the dam.

1. The Erosion Monitoring Plan will be implemented within three month's of the FERC's approval of the Plan.
2. The permittee shall establish 10 monitoring stations between Leesville Dam and Altavista at the locations described in the Appalachian Power Company Smith Mountain Project 2201 Erosion Monitoring Plan, Appendix C dated July 2008. GPS data will be collected to ensure that the same sites are monitored each time. An additional monitoring station no more than one mile downstream of the dam will also be established.

3. Monitoring will be accomplished by taking photographs and surveying bank pins semi-annually.
4. The monitoring frequency may be reduced to annual monitoring should the results show that erosion increments are minimal between semi-annual monitoring events.
5. The initial survey will be completed within two year's following the Commission's approval of the Erosion Monitoring Plan
6. Photographic documentation of the monitoring sites downstream of Leesville Dam will be compared to previous photographic documentation. Initial and final results of bank pin measurements will also be compared. A narrative comparison will be made of observed differences in photographic evidence and height of bank pins between monitoring events.
7. A report will be submitted to DEQ within six months of completion of the initial survey. The report will contain:
    - the survey results,
    - photos and an assessment of the erosion rates at the monitored sites,
    - identification of any project related erosion effects,
    - a corrective action plan detailing actions to be taken to address any project- related erosion effects , including a schedule to address the observed deficiencies,
    - documentation of consultation with stakeholders in the development of the report, including at a minimum DEQ, DCR and DGIF,
    - updates to the monitoring plan and schedule, if any, including identifying the dates of the next anticipated survey.

Issuance of a VWP Individual Permit for Cutalong, Joint Permit Application (JPA) Number 07-0860, Louisa County: In response to comments received during the draft permit and public hearing comment periods, staff requested the applicant to conduct additional sediment and water chemistry testing. The results of the tests are still pending. Staff anticipates that results will be similar to the earlier tests; however, if the results indicate an unacceptable risk to water quality, then staff will make appropriate recommendations at the board meeting.

I. PROJECT BACKGROUND:Project Description: The applicant, Cutalong LLC, submitted a Joint Permit Application (JPA) for a VWP Individual Permit for the proposed activities, which was received by the Virginia Department of Environmental Quality (DEQ) on April 17, 2007. The applicant proposes to construct a residential development on a 1,007 acre parcel in Louisa County, Virginia. The proposed development consists of approximately 846 residential units, utilities, infrastructure, an 18-hole golf course, clubhouses, a boat storage facility, a boat common area with 98 boat slips, a water withdrawal from Contrary Creek, and dredging of Contrary Creek/Lake Anna.

Proposed Impacts: The proposed development of the residential area and golf course will result in the permanent impact to 0.76 acre of palustrine forested wetlands and 0.11 acre (897 linear feet) of stream channels; the conversion impact to 1.14 acres of palustrine forested wetlands; and, the temporary impact to 0.40 acre of palustrine forested wetlands and 0.02 acre (254 linear feet) of stream channels.

The proposed dredging for boat slips and boat access channels will result in the permanent impact to 9.30 acres of open water (Contrary Creek Cove of Lake Anna) and 0.15 acre palustrine emergent wetlands and the temporary impact to 0.05 acre of palustrine emergent wetlands.

The proposed project includes the installation and operation of a water withdrawal from Contrary Creek (located approximately 1,400 feet upstream from Lake Anna) to irrigate the golf course. The irrigation demand for the golf course was demonstrated to be a maximum annual withdrawal of 96 million gallons during establishment and 48 million gallons during a normal year. The withdrawal rate proposed in the permit is 480,000 gallon per day when the lake level is above 249.75 and flow in Contrary Creek is within normal ranges.

Proposed Compensation: The applicant proposes to create 1.12 acres of palustrine forested wetland on-site and preserve 24.2 acres of on-site wetlands to compensate for the impacts to wetlands. The applicant proposes to preserve 15,900 linear feet of on-site stream channels with 15.7 acres of wetland riparian

buffer and 29.7 acres of upland buffer to compensate for the impacts to stream channels. The stream channel buffers range from 25 feet to 200 feet wide along both sides of the channel.

Draft Permit Comment Period: The public notice was published in the Central Virginian on March 6, 2008. The public notice period ended on April 7, 2008. Thirty-four responses were received during the public comment period. Based upon staff's review of the comments, staff recommended that the Regional Director authorize staff to convene a public hearing. Authorization to convene a public hearing was received on May 7, 2008.

Public Hearing Comment Period: The hearing public notice was published on June 5, 2008 in the *Central Virginian*. The public hearing was held on July 10, 2008, in the Auditorium of Louisa County Middle School in Mineral, Virginia. Mr. Michael McKenney was the Hearing Officer. The public comment period was from June 6, 2008, through July 25, 2008. At the public hearing eighteen oral comments were received from citizens, of which, ten were statements of support for the project. In addition, staff received six written comments (two comments from new individuals and four comments from individuals that had previously commented) during the hearing comment period.

During the public comment periods, staff attended a Lake Anna Civic Association Board Meeting, Shorewood Subdivision Annual Home Owner Association (HOA) Meeting, and Freshwater Estates Annual HOA Meeting to hear citizen concerns and answer questions.

II. SUMMARY OF COMMENTS RECEIVED: Summarized List of Comments Received:

The comments received during the comment periods for both draft permit and the public hearing contained similar environmental concerns regarding the following:

- The proposed water withdrawal will decrease the water level and water supply of Lake Anna and the flow of Contrary Creek, and no withdrawal should be permitted when lake level is below normal pool.
- The dredging will reduce water quality of Contrary Creek/Lake Anna and impact aquatic life.
- The removal of polluted sediment from Contrary Creek will cause harm to the environment.
- The project will cause significant ecological impacts.

In addition, the comments received during the comment periods for both draft permit and the public hearing contained similar concerns regarding the following topics outside the VWPP Program purview:

- The development's potential to impact the ground water wells of Shorewood Subdivision.
- The increase in the boat traffic may adversely affect safety, shoreline stability, and water quality.
- Changes to the development plan that were not part of the original preliminary plan.

A summary of the comments expressing concern for the environment and staff's responses to those comments is below. The comments in support of the project provided at the hearing are not included in the summary.

III. SUMMARY OF CHANGES TO DRAFT PERMIT IN RESPONSE TO CITIZEN COMMENTS: To address the recommendations and concerns received from coordination with State Agencies and citizens during development of the draft permit, staff has made several changes to the draft permit that was advertised. Cutalong LLC has indicated their acceptance of these changes. The changes are described below and are highlighted in the draft permit.

Part I.A.2 was modified to reference the approved location of the intake structure in response to a comment received from Lake Anna Civic Association expressing concern that the authorized location was unclear.

- Part I.K.3 specifies the method and dimensions of the authorized dredging. This condition was modified to reflect that 8.1 acres of the dredging shall occur mechanically under dry conditions. The requirement for dredging under dry conditions was incorporated into the permit in response to citizen comments.
- Part I.K.7 was deleted because it pertained to hydraulic dredging, which was removed from the permit as a method.
- Part I.K.8 was added to put additional emphasis on the DGIF's time-of-year restrictions on dredging activities.
- Part I.L.2.e was added to specify what information staff must approve prior to commencement of any dredging activities. This condition was modified to reflect the information required for dredging

under dry conditions vs. dredging under wet conditions. The requirement for dredging under dry conditions was incorporated into the permit in response to citizen comments.

- Part I.L.3 requires water quality monitoring during the dredging operation. This condition was modified to clarify that water quality monitoring will be required in relation to the dredging under wet conditions.
- Part I.P.4.o was clarified to ensure that plats for the creation sites and preservation sites were submitted within the timeframe specified in the final plan.
- Part I.R. Nos. 1, 2, 3, and 4, were modified and No. 5 was inserted to reflect the modified limitations on withdrawal limits that occur as the result of comments received from the DGIF and Lake Anna Civic Association. These conditions are more protective of the water level in Lake Anna then the conditions that were proposed in the public noticed draft permit.
- Part I.R.10 was condition Part I.R.9 in the public noticed draft. This condition requires the permittee to measure and record the lake level everyday that a withdrawal occurs. This permit condition was modified in response to citizen comments to include the requirement for real time flow measurement and reporting of Contrary Creek.
- Part I.R.11 was condition Part.IR.10 in the public noticed draft permit. This condition requires that the permittee measure real time flow of Contrary Creek to meet minimum instream flow requirements and make the information available to the public in response to comments from Lake Anna Civic Association and DGIF's instantaneous flow limitation.
- Part.I.R.13 was condition Part I.R.10 in the public noticed draft permit. This condition was modified to include the measurement of flow in Contrary Creek as a required measurement to ensure compliance with DGIF's recommendation that only a percent of the instantaneous flow be withdrawn from the Creek.
- Part I.R.14 of the public noticed draft permit required the permittee to construct the proposed V-shaped cross vane structure for the water withdrawal from porous material to prevent impeding stream flow. This condition was deleted because the modifications to the permit in response to citizen comments preclude using the proposed V-shaped design. Part I.R.12 was inserted to replace condition Part I.R.14, this condition states that staff must approve the design of the intake structure prior to commencing any withdrawal activities.
- Part I.R.16 was condition Part I.R.13 in the public noticed draft permit. This condition was modified to include the measurement of flow in Contrary Creek as a required measurement to report in the annual report.
- Part I.R.17 was added in response to comments received from the Department of Mines, Mineral, and Energy after the close of the public comment period. This condition requires that the permittee evaluate the precipitate that may accumulate in the water treatment basin as a result of the water treatment process and take any special disposal procedures that may be required depending on the chemical make-up of the precipitate.

The changes to draft permit for clarification are as follows:

- Part I.A.4 was modified to include additional information submittals received after the draft was public noticed on March 6, 2008 to clarify what type of information was received.
- Part I.C.26 was erroneously numbered No. 29 and this error was corrected.
- Part.I.R.7 was reworded in response to comments indicating that the condition was unclear.

Summary of Public Comments and Staff Responses to Comments:

Water Withdrawal

Withdrawal Impacts

1. *The proposed water withdrawal is excessive, particularly considering recent drought conditions, and will result in major decreases in Lake Anna water levels, which will contribute to degraded water quality and increased water temperatures, boating hazards from previously submerged items, fire hazards from unusable hydrants, impacts to wildlife and aquatic life, shoreline stabilization problems, and impacts to local business due to a loss of customers.*
   Water withdrawals associated with Cutalong should be considered cumulatively with withdrawals for the North Anna Nuclear Power Station, and any potential future uses by Louisa County.

Water withdrawals should only be allowed when the water in Lake Anna is above 250 mean sea level (msl).

The draft permit that was public noticed included the following limitations on the proposed withdrawal:

- In the first two calendar years in which water is withdrawn from Contrary Creek, the maximum withdrawal shall not exceed 22.3 million gallons in any month; the maximum annual withdrawal shall not exceed 96 million gallons and the maximum instantaneous withdrawal shall not exceed 500 gallons per minute (gpm).
- In the third calendar year in which water is withdrawn from Contrary Creek, and thereafter until water withdrawals are eliminated (Permit Condition Part I.R.6), the maximum withdrawal shall not exceed 14.8 million gallons in any month; the maximum annual withdrawal shall not exceed 48 million gallons and the maximum instantaneous withdrawal shall not exceed 250 gpm.
- In the first two calendar years in which water withdrawals take place, the permittee may not pump any water from Contrary Creek when Lake Anna is at or below an elevation of 248.5 feet above msl.
- In the third calendar year and thereafter until the year the third nuclear reactor on Lake Anna is using water, the permittee may not pump any water from Contrary Creek when the lake is at or below an elevation of 249.75 feet above msl.
- After the third nuclear reactor on Lake Anna begins to use water, the permittee may not withdraw any water from Contrary Creek whenever the third nuclear reactor is operating in water conservation mode. It is the responsibility of the permittee to become aware of the conditions that require the third reactor to be in water conservation mode.

In response to citizen comments, two meetings with the Lake Anna Civic Association (LACA), and comments received from the Virginia Department of Game & Inland Fisheries (DGIF), the conditions were modified to place the following restrictions on the withdrawal:

- When the water elevation of Lake Anna is at or below the elevation of 249.75 above msl, this permit authorizes the withdrawal of no more than 0.6 cubic feet per second from Contrary Creek.
- No water withdrawal activities shall occur when the Lake Anna dam is releasing less than 40 cubic feet per second.
- The withdrawal shall not exceed 10% of the instantaneous flow from March 1st through June 30th when the instream flow is less than or equal to 60% of the mean annual flow (3.5 cubic feet per second).
- The withdrawal shall not exceed 10% of the instantaneous flow from July 1st through October 31st when the instream flow is less than or equal to 30% of the mean annual flow (1.8 cubic feet per second).
- The withdrawal shall not exceed 480,000 gallons per day.
- After the third nuclear reactor on Lake Anna begins to use water, the permittee shall not withdraw any water from Contrary Creek whenever the third nuclear reactor is operating in water conservation mode. It is the responsibility of the permittee to become aware of the conditions that require the third reactor to be in water conservation mode.

If the applicant were permitted unlimited withdrawal, the golf course requires a maximum of 96 million gallons of water per year when the grass is being established and 48 million gallons per year thereafter. The surface size of Lake Anna is approximately 13, 000 acres. The instantaneous removal of 96 million gallons would result in a decrease of approximately ¼ inch in the surface elevation of Lake Anna and the removal of 48 million gallons would result in a decrease of $^{1}/_{8}$ inch. Staff does not believe the proposed withdrawal will impact lake levels because the withdrawal of 96 million gallons is the maximum annual demand. However, the proposed permit only authorizes withdrawals in accordance with restriction listed above (Permit Condition Part I.R).

The permit conditions are structured to encourage the permittee to withdraw water, not to exceed 480,000 gallons per day, when Lake Anna is near or above normal pool and to store the water on-site for use when the lake levels are lower than the elevation of 249.75 above msl.
With respect to future uses required by Louisa County, staff understands that Louisa County has been working to project future population and water demands for the County. At this time, staff has received no information indicating that the proposed withdrawal from Contrary Creek will conflict with the County's future water needs; however, water needs for human consumption will be given the highest priority.

2. *The water flow in Contrary Creek has not been adequately studied, and the proposed water withdrawal will adversely affect water levels in the creek.*
When lake levels are above normal pool, there should be no daily limit on the withdrawal. The daily limit amount provides the applicant enough water.
The proposed permit protects the flow of Contrary Creek by restricting the withdrawal from March 1st through October 31st. The restrictions are based on recommendations from DGIF. The proposed permit protects the lake level by limiting the withdrawal when Lake Anna is at or below 249.75 elevation above msl.
Based on an evaluation of stream flow data obtained from U.S. Geological Survey (USGS) Stream Gauge on Contrary Creek (USGS 01670300), which provided 135 months of daily stream flow data from October 10, 1975 through December 31, 1986, the mean annual flow of Contrary Creek is 5.82 cubic feet per second. The withdrawal rate of 480,000 gallons is equal to approximately 0.89 cubic feet per second or 15% of the mean annual flow; however, this withdrawal rate will most likely occur in the winter months when the flow in the creek is likely higher than the mean annual flow.
The restrictions on the water withdrawal require the permittee to rely on storage and water management practices to irrigate the golf course. Contrary Creek provides marginal aquatic habitat. However, DGIF requested that the flow in the creek be protected to provide sufficient flow for establishment of aquatic life if water quality is improved.

<u>Permit Conditions:</u>

3. *The 15 year permit term should not apply to the proposed water withdrawal; a realistic date for the conclusion of the water withdrawal should be required. The withdrawal should be limited to two or three years.*
The applicant has requested the water withdrawal from Contrary Creek until such time that the effluent from the wastewater treatment process can provide an adequate irrigation supply. The use of effluent is not an available alternative to the applicant at this time, and it is uncertain when it will be available. The permit condition requires that withdrawal activities cease when the average flow of effluent to the holding pond exceeds 0.18 million gallons per day for any six month period.
4. *Anywhere a reference is made to Lake Anna height elevation, the term "normal pool level at that time" should be used and not 250ft msl. Also, "¼ below normal at that tim"e should be used instead of 249.75 ft msl for ¼ foot below normal pool. This will cover DEQ's intent if the Lake Anna normal level is increased by 3 inches in the future without having to modify the permit.*
The proposed permit is drafted in consideration of the current lake level. If the normal pool elevation of Lake Anna changes, the permit will be modified as necessary.

<u>Alternative Irrigation Sources:</u>

5. *The applicant should consider using existing groundwater wells to meet irrigation needs. DEQ should consider whether the aquifer is capable of supporting the use of groundwater wells for irrigation.*
There are 19 possible wells associated with the Cutalong development. The applicant has selected nine wells that combined produce approximately 280 gpm. At maximum capacity, the wells would provide enough water to irrigate the golf course during a normal year but not during the grow-in period or drought conditions. The applicant has indicated that the following factors prevent the wells from being a practical alternative: the wells should not be pumped at maximum capacity for 24 hours a day because of groundwater drawdown risks, the proposed development will rely on these wells for

drinking water, and the prohibitive cost of designing and installing an irrigation system to collect irrigation water from the nine different well sites.
Staff has received comments from landowners of the adjacent property expressing concern that the proposed development could impact their drinking water wells. While the VWP Permit program does not have authority over the groundwater wells, staff has considered these concerns in our evaluation of irrigation alternatives. Staff determined that wells are not a practicable alternative in-lieu of withdrawing and treating surface water from Contrary Creek.

6. *The applicant should buy water from Louisa County to irrigate the proposed golf course.*
This alternative was determined not to be practicable for the applicant because Louisa County water lines are approximately five miles from the project site and the cost of constructing a connection and purchasing water from the County far exceeds the cost of withdrawing water on the project site. Staff has determined that the treatment and use of the impaired water from Contrary Creek is the least environmental damaging practicable alternative for irrigation water. Connecting to county water or using groundwater would result in additional environmental impacts that are avoided by the treatment and use of the pH impaired water from Contrary Creek.

Monitoring and Compliance:

7. *How would compliance with water withdrawal restrictions be monitored?*
The permit conditions require the permittee to install a lake level gauge in Lake Anna and a flow measuring device in Contrary Creek. The lake level gauge shall be calibrated to Dominion Power's lake level gauge and will be located in a publicly visible location in Contrary Creek Cove of Lake Anna. The permittee will be responsible for recording the lake level and flow in Contrary Creek each day a water withdrawal occurs. These records shall be submitted to staff annually and will be available for review by staff at anytime throughout the year.
8. *What penalties may be imposed on the applicant if their withdrawal amounts exceed those allowed by the permit?*
If a violation of the permit occurs, staff will assess the severity of the violation and take appropriate action. If staff determine that a violation warrants a penalty, then Va. Code § 62.1-44.15 allows the State Water Control Board to issue consent orders and assess penalties for failing to comply with a permit or for violating water laws and regulations.

Miscellaneous Withdrawal/Irrigation Comments:

9. *Will the authorization of the proposed withdrawal establish a precedent for allowing future withdrawals from other developers?*
Requests for future water withdrawals will be evaluated based on the demand in the watershed and the information available at the time of such a request. This permit is not intended to set a precedent. This project and future projects must be reviewed in accordance with applicable laws, regulation, and guidance.
10. *DEQ should require Cutalong re-activate the USGS gauging station USGS 01670300 at Route 522 to determine "real time" minimum instream flow and amount of water removal that is allowed.*
Staff does not believe a gauge station is necessary; however, the permit requires that the permitee install and calibrate a method to measure instream flow.
11. *Provisions that limit screen size of intake strainers and require maintenance of some continued flow thru the V-shaped cross vane do not seem to apply to Contrary Creek which is devoid of aquatic life. DEQ should determine if there is any advantage to eliminating Permit Conditions Part I. R7 and R14 from requirements.*
Why does the permittee need two 30 inch intake pipes to pump 500 gpm? Why is it necessary to have a "low flow" gravity feed intake pipe? The cross vane with irrigation head gate and sediment sluice back to the river is not appropriate for this operation. One system should be designed for this particular situation with proper sizing of the intake pipe which will not allow sediment to deposit back in the creek. No "low flow" gravity feed intake pipe should be necessary since at low flow, no water should be withdrawn.
The proposed intake design that the applicant submitted to staff via e-mail on February 7, 2008 is a conceptual plan. Because the withdrawal conditions were modified in response to comments received

from the public and the DGIF, the proposed design will change. The applicant is unable to provide specifications for the intake prior to issuance of the permit, but the permit requires that the design must be approved prior to commencing any withdrawal activities.
The requirement to use a one mm intake screen was incorporated into the permit in response to comments received from the DGIF. Contrary Creek is presently poor habitat for aquatic life; however, the water quality could be improved in the future and the conditions are designed to protect that future use.

12. *The storage of 96 million gallons of water does not appear to be feasible on the Cutalong site, based on the size of the ponds shown on the proposed plan.*
The applicant has stated that the withdrawal water will be treated in the pond located east of the proposed Contrary Creek bridge crossing and north of Contrary Creek. The water will then be pumped to a storage pond located in the northeast portion of the property. The exact size and location of the ponds may vary throughout the design process; however, this is acceptable under the VWP Permit Program because the proposed ponds will not be located in surface waters. The applicant has proposed to store 45 million gallons of irrigation water in the ponds.
13. *How will water from Contrary Creek be treated for acid mine drainage, and how will precipitate from this treatment be disposed in a non-polluting manner?*The method the applicant selects to treat the irrigation water withdrawn from Contrary Creek is not reviewed under the VWP Permit application process. However, any method must comply with applicable state laws and regulations. After determining the treatment method, the applicant will have to evaluate the possible precipitate and dispose of it in accordance with applicable state laws and regulations. In response to comments received from the Virginia Department of Mines, Minerals and Energy and citizens, the following permit condition, Part I.R.17, has been included in the draft permit to ensure that there is oversight of any possible pollution that may occur as the result of the treatment process:
    "The permittee shall submit a management plan for the sediment and/or precipitate that accumulates in the withdrawal water storage basin. The plan shall be submitted to staff within 6 months of the commencement of treating withdrawal water for pH in the basin. The plan shall include the following information:
        a. The concentrations of PCBs, cadmium, copper, lead, arsenic, and zinc in the accumulated sediment/precipitate in the storage/treatment basin;
        b. A projection of the future concentrations of these constituents;
        c. The anticipated maintenance schedule; and
        d. A disposal plan for any dredged material from the storage/treatment basin."
14. *Where is the main water for the housing development associated with Cutalong coming from?*
The water for the main development is proposed to be supplied from nine groundwater wells.
15. *In drought conditions, Table 2-1 of the application indicates an increased water requirement from 48 million gallons to 69 million gallons for irrigation demands (increase of 40%). Since Cutalong is requesting 96 million gallons for normal conditions, can we expect in drought time this request would go to 134 million gallons? Is this allowed in this permit?*
No. The draft permit that was public noticed on March 6, 2008 authorized the maximum annual withdrawal of 96 million gallons. This limit was intended to allow for irrigation demands during grow-in conditions and did not allow additional withdrawal during drought conditions.
16. *DEQ's Terminology for screen size is unclear. "Not larger than 1 millimeter in width." Suggest wording be changes to agree with DGIF's wording: "be fitted with 1mm intake screen".*
Permit Condition Part I.R.7 was modified to incorporate the suggested wording.

<u>Dredging:</u>

17. *Does this permit allow for the existing shoreline to be modified either in Contrary Creek or Lake Anna? Any modifications to the shoreline may not be approved by Dominion Power. The shoreline shown on contractor provided drawings sheet 33 is not clear.*
The boat access/temporary ingress and egress for dredging depicted on drawings sheet 33 in the Joint Permit Application received by staff on August 24, 2007 is the only location where the shoreline/edge

of normal pool is proposed to be changed. The applicant is responsible for coordinating their project with Dominion Power.

Loss of Ecological Resources:

18. *The proposed plan will have an unnecessary and significant ecological impact on Contrary Creek, Lake Anna and the surrounding areas. It is inappropriate to permanently impact any existing wetlands or riparian areas, particularly in this sensitive headwater system for this project. Cutalong is proposing to dredge over nine acres of Contrary Creek but proffered only 1.12 acres of wetland creation to help protect water quality.*

The applicant's purpose for the project is to develop a residential subdivision with golf course and waterfront amenities.The original plan for the development was conveyed to the applicant with the purchase of the property and included a 27-hole golf course, marina, residential homes, access roads, hotel, commercial development, and stormwater management facilities. The applicant was able to avoid impacts by realigning the golf course, redesigning the residential layout, and moving stormwater management facilities out of surface waters. The original plan would have resulted in impacts to 8.4 acres of wetlands and the conversion impacts to 6.0 acres of palustrine forested wetlands to palustrine emergent wetlands. The proposed plan reduces wetland impacts by 90% and stream impacts by 68%. In addition, conversion impacts were reduced by 80% from the original plan by reducing the overall number of golf holes and realigning the remaining holes.

The development of the residential area and golf course will result in the permanent impact to 0.76 acre of palustrine forested wetlands and 0.11 acre (897 linear feet) of stream channels, the conversation impact to 1.14 acres of palustrine forested wetlands, and the temporary impact to 0.40 acre of palustrine forested wetlands and 0.02 acre (254 linear feet) of stream channels. Compensation for permanent wetland impacts shall be provided through the on-site creation of 1.12 acres of palustrine forested wetlands and the on-site preservation of 24.2 acres of palustrine forested wetlands. Compensation for permanent stream channel impacts shall be provided through the on-site preservation of 15,900 linear feet of stream channel with adjacent riparian buffers consisting of 15.7 acres of wetlands and 29.7 acres of upland areas.

The appropriate wetland compensation is determined based upon ratios, which has been standardized for each type of wetland proposed for impact. For streams, DEQ and the U.S. Army Corps of Engineers (USACE) use a standardized methodology, known as the Unified Stream Methodology (USM), to determine appropriate compensation for stream channel impacts. The USM uses an environmental assessment of the stream channel proposed for impact to determine the compensation requirement. The applicant then applies the compensation requirement to USM guidelines, which determine how much of the requirement is satisfied by various compensation activities. The proposed stream compensation and wetland compensation fulfills the required compensation requirements in accordance with 9 VAC 25-210-116.

In accordance with 9 VAC 25-210-80.1.k.(5)(d), compensation for open water impacts may be required, as appropriate, to protect state waters and fish and wildlife resources from significant impairment. Because the permit requires that majority of the dredging occur under dry conditions and after review of the sediment sampling results, staff anticipates impacts to water quality during dredging will be minimal and temporary in nature. Based upon the water quality history of that area of the lake, staff does not anticipate that the removal of dredged material to deepen and widen this channel will reduce its function and values; therefore, compensation is not required for the dredging in the proposed draft permit. The proposed project meets the necessary requirements and qualifies for a permit under the VWP Permit Program regulations and guidance. Based on staff's evaluation of the project, the effect of the proposed impacts will not cause or contribute to impairment of state waters or fish and wildlife resources.

Water Quality:

19. *Water and sediments in Contrary Creek are known to have very high pH levels and heavy metals contamination. The dredging of the creek will result in the disturbance and suspension of these contaminated sediment, and movement downstream, resulting in adverse effects to water quality;, aquatic ecosystem;, and the health of humans, fish and wildlife.*

What is the analytical basis for stating that dredging will not have an adverse impact on water quality?
If water quality is adversely affected by wet dredging, why would DEQ allow wet dredging in an area of perhaps 0.75 acre in front of the Freshwater Estates which is totally unrelated to the Cutalong development?
How can DEQ reconcile dredging with "no adverse effect on water quality"?
Past mining activities in the Contrary Creek watershed have caused water quality problems in the stream and the Contrary Creek arm of Lake Anna. Specifically, the on-going acid mine drainage and historic mine tailings cause acidic stream conditions and elevated levels of heavy metals in the water column and sediment. The stream and the upper portion of the Contrary Creek arm of the lake are identified on the Clean Water Act §303(d) list of impaired waters for not supporting the aquatic life, wildlife, and fish consumption beneficial uses. The draft *2008 305(b)/303(d) Water Quality Assessment Integrated Report* identifies the impairments as due to acidity, as measured by pH, and elevated levels of cadmium, copper, lead, and zinc in the water column. Additionally, sediment levels have been observed above screening levels for copper, lead, and zinc.
It is important to note that Virginia does not have sediment criteria against which to assess sediment results. Rather, sediment contaminant levels are compared to guidelines intended to identify levels above which adverse effects are likely to occur to benthic dwelling organisms. Concentrations of sediment contaminants above the guidelines, or screening levels, are flagged in the water quality assessment as having observed effects likely to impact benthic organisms.
As part of the evaluation of the proposed dredging, sediment sampling was conducted to characterize the sediment for determining regulatory implications of managing and disposing of the spoils. The applicant collected 11 sediment samples from the proposed dredging area and tested for the absence or presence of the eight Resource Conservation and Recovery Act (RCRA) metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. The sediments were collected from approximately one to two feet below the existing bottom surface. The results of this monitoring confirm elevated levels of metals in the sediment, with lead levels exceeding Agency screening values at three locations.
To minimize the impact dredging may have on the release of these constituents into the water column, staff modified the permit to required dredging be completed under dry conditions where practicable. The applicant determined that dredging under dry conditions was practicable within the narrow portions of Contrary Creek but not practicable for the shoal in front of the Freshwater Estates subdivision and an area at the mouth of the creek. This equates to dredging approximately 1.2 acres for 4,400 cubic yards of material under wet conditions and 8.1 acres for 42,600 cubic yards of material under dry conditions. The design of the structures associated with dry dredging is required in the permit after its issuance. Staff proposed that the applicant submit the dry dredging design after permit issuance for staff approval to allow the applicant time to review all possible scenarios. Based on the conceptual information the applicant has provided to staff, the dry dredging will be completed via the installation of a "portadam" portable cofferdam system.
In response to comments received during the draft permit and public hearing comment periods, staff requested the applicant to conduct additional sediment and water chemistry testing. The results of the tests are still pending. Staff anticipates that results will be similar to the earlier tests; if the results indicate unacceptable to water quality then the staff recommendation to the State Water Control Board will be modified accordingly.

20. *LACA requests double silt fence be installed around the wet area to be dredged and daily inspections of the fence be accomplished to ensure no leakage from boundary occurs.*
    The proposed permit does not specify measures to be employed, but the permit requires that the sediment and erosion control measures for dredging be submitted to and approved by staff prior to commencement of any dredging activities.

<u>Disposal of Material:</u>

21. *The improper disposal of contaminated dredge spoils may result in the leeching of contaminants into ground and surface water.*

The dredged material will be placed in an upland location on the property. As part of the application process, the dredged material was evaluated to determine if restricted disposal methods would be required. The applicant collected 11 sediment samples from the proposed dredging area and tested for the absence or presence of the eight RCRA metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. The sediments were collected from approximately one to two feet below the existing bottom surface. The constituent levels were such that the sediment does not meet the levels that would qualify as a waste characteristic of a hazardous waste for toxicity. The applicant intends to stock pile the material and use the material as fill underneath roadways. The beneficial reuse of this material as an aggregate for the roadway also excludes it from the Virginia Solid Waste Management Regulations.

Water Quality – Golf Course:

22. *Chemical run-off of fertilizers and herbicides from the golf course will contaminate ground and surface water.*
    Permit Condition Part I.I.3 of the permit requires the development of an Integrated Pest Management Plan to promote conservation management techniques regarding the amount of fertilizer and pesticides used on the golf course and requires that the plan be approved by the Virginia Department of Conservation and Recreation.

Permit Process:

23. *Because Dominion Power is responsible for Lake Anna, do federal environmental laws apply to the proposed project?*
    The USACE determined that the mechanical dredging from Contrary Creek was not regulated under Section 404 of the Clean Water Act; therefore, the proposed dredging does not require USACE authorization. The USACE verified that the residential portion of the project qualifies for authorization under the State Program General Permit (07-SPGP-01) via e-mail dated December 10, 2007.
24. *Has an Environmental Impact Statement been conducted on the project?*
    An Environmental Impact Statement is not required under the VWP Permit Program. VWP Permit Program staff assesses impacts to surface waters to protect the beneficial uses of the resources and to protect water quality under the DEQ Water Division. Based on staff's evaluation of the project, the effect of the proposed impacts in accordance with the proposed permit conditions will not cause or contribute to the further impairment of state waters or fish and wildlife resources (or beneficial uses).
25. *Because many property owners on and around Contrary Creek are not full time residents, they did not have the opportunity to see the public notice published in the Central Virginia newspaper. DEQ should hold a public hearing to provide additional opportunity for those residents to comment.*
    A public hearing was held on July 10, 2008, at the Louisa County Middle School in Mineral, Virginia.
26. *Will DEQ make the suggested changes to the draft permit based on the LACA recommendations? If not what can be done to make these changes? Is a public hearing required to get the changes or will the DEQ staff make all decisions?*
    LACA provided comments on the project via e-mail dated April 3, 2008. In addition, on May 2, 2008, staff met with representatives of LACA and the applicant to discuss LACA's concerns about the project. Staff has reviewed LACA's comments and has revised the draft permit to address several of their concerns. LACA's concerns are included with the comments addressed in this summary.
27. *Do the supporting documents submitted by Cutalong for the permit become part of the permit? If so, then the documents should be revised to show the current plan.*
    The supporting information is part of the application review process, and certain documents that are used to develop permit limits are enforceable via reference in the permit. Typically, during the application review process, the designs and technical information are changed several times in response to staff, other agency, and citizen comments. Depending on the nature of the changes, staff requires updated maps and information that solidifies the authorized activities prior to issuance of the permit. However, some of the specifications, such as intake structures, cannot be finalized until after permit issuance.

In response to this comment, Permit Condition Part I.A.2 was modified to reference the location of the intake. Because the water withdrawal details and dredging details are being modified in response to citizen comments, the application materials will not reflect these updates. However, the permit requires that the detailed plans for the water withdrawal and the dredging be approved by staff prior to commencing the water withdrawal and dredging activities.

Miscellaneous Concerns:

Zoning and Local Approval Comments:

28. *The proposed construction of 845 homes, including town homes and apartments, will result in the decrease of property values and quality of life for current Lake Anna residents.*
Because the development was originally approved by the Louisa Planning Commission and the Louisa Board of Supervisors prior to the inclusion of a water withdrawal component, the entire development should be taken back to County for review.
The VWP Permit Program does not have authority over the zoning, the number homes, or other aspects of the development beyond the work proposed to occur in surface waters and the proposed withdrawal from surface waters.

Boating Traffic and Safety:

29. *The project's proposed additional boat slips will result in an unacceptable level of increased boat traffic; posing safety risks, overcrowding, and increased pollution levels.*
The VWP Permit Program does not have authority to regulate boat traffic. Aspects of boat traffic for this project are regulated by DGIF and Louisa County.
30. *The proposed dredging would exasperate the odor problem that currently exists in this portion of Contrary Creek.*
The odor of surface waters is not within the purview of the VWP Permit Program. However, the odor of the existing surface water is not intended to be exasperated by the dredging activity. During dredging operations, there will be a temporary impact to the area through exposure of saturated sediment. However, staff does not anticipate a long term impact on the odor of the water as the result of removing sediment and storing it in an upland disposal area.
31. *The proposed activities will disturb wildlife habitat and displace these species. To quote in part a press release statement by DEQ Director David K. Paylor "....it is imperative that Virginia businesses and industry continue to reduce the amount of chemicals entering the environment."*
As part of the of the application review process, the project was coordinated with the Virginia Department of Conservation and Recreation, DGIF, U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency. The intent of the coordination was to determine if there are any known occurrences or potential occurrences of threatened or endangered species located within the project boundary or the surrounding area. Based on the coordination, staff does not anticipate that the project will have an adverse impact on these populations.
Compensation for permanent impacts to surface waters includes the on-site creation of 1.12 acres of palustrine forested wetlands and the on-site preservation in perpetuity of 24.2 acres of palustrine forested wetlands and 15,900 linear feet of stream channel with adjacent riparian buffers consisting of 15.7 acres of wetlands and 29.7 acres of upland areas. The long term preservation of these riparian corridors is intended to off-set the surface water impacts from development.

General Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation for Potable Water Treatment Plants (9 VAC 25-860): The staff intends to bring to the Board, at the October 16th, meeting, a request to adopt the draft general permit regulation for Potable Water Treatment Plants. This general permit regulation will be issued for a five-year term. The proposed regulatory action is needed in order to establish appropriate and necessary permitting requirements for discharges of wastewater from potable water treatment plants (PWTPs). These discharges are considered to be point sources of pollutants and thus are subject to regulation under the VPDES permit program.

A public hearing was held June 17, 2008 for the draft regulation and no comments were received. The public notice comment period ended on July 11, 2008 and no comments were received. Since the

proposal was presented at the April 10, 2008 Board meeting for authority to hold public hearings, the following changes were made to the draft general permit regulation. The reverse osmosis Part I.A. effluent limitations for Total Dissolved Solids (TDS) maximum of 800 mg/l was changed to no limitation, monitoring requirement only. This change is in accordance with Effluent Guidelines for Reverse Osmosis Plants Inter-Departmental Memorandum dated August 7, 1987. This memorandum states the TDS limitation of a maximum of 800 mg/l is applicable to reverse osmosis wastewater discharges where the raw water source is well water. The raw water source for reverse osmosis plants covered by this general permit is surface waters. The second revision to the general permit is to the reverse osmosis Part 1.A effluent limitations for Dissolved Oxygen maximum limitation of 0.011 mg/l that was changed to "not applicable" (NA). This revision is a correction of a typographical error.

EPA by email dated August 28, 2008, had no objection to the issuance of the final draft VPDES general permit for potable water treatment plants, VAG64.

Proposed Rulemaking to Amend Nutrient Waste Load Allocations for New Kent Co.-Parham Landing STP in 9 VAC 25-720-120.C. (Water Quality Management Planning Regulation, York River Basin): By letter dated 6/5/08, New Kent County petitioned for decreased nutrient waste load allocations (WLAs) for their Parham Landing STP, located in the York River Basin, which is now in design for upgrade and expansion. The County originally planned to increase the design flow from 0.57 million gallons per day (MGD) to 3.0 MGD, and now intends to construct a smaller addition that will raise the design flow to 2.0 MGD. Funds saved by constructing the smaller plant will be used to build a reuse system that will provide bulk irrigation water to aid in preventing groundwater shortages in the area. This sizing change results in lower discharged nutrient WLAs; the total nitrogen allocation will decrease by 18,273 lbs/yr (from 54,820 to 36,547 lbs/yr) and the total phosphorus allocation will decrease by 2,132 lbs/yr (from 6,396 to 4,264 lbs/yr). The County asked that since this request is expected to be non-controversial, that the rulemaking be "fast-tracked". The effect of the proposed amendments is as follows:

VA Water Body ID	VPDES	Total Nitrogen WLA (lbs/yr)	Total Phosphorus WLA (lbs/yr)
F14R	VA0088331	~~54,820~~ *36,547*	~~6,396~~ *4,264*

Notes: (1) Parham Landing WWTP: waste load allocations (WLAs) based on a design flow capacity of ~~3.0~~ *2.0* million gallons per day (MGD). If plant is not certified to operate at ~~3.0~~ *2.0* MGD design flow capacity by 12/31/10, the WLAs will decrease to TN = 10,416 lbs/yr; TP = 1,215 lbs/yr, based on a design flow capacity of 0.57 MGD.

CURRENT STATUS
Agency Response to Petition for Rulemaking published in the Virginia Register on 8/4/08.
Public Comment Period closed 8/25/08; no comments received.
Attorney General's Office certification of Board's authority to take the proposed action has been requested.

Proposed Rulemaking to Amend Nutrient Waste Load Allocations for Merck and FWSA-Opequon STP in 9 VAC 25-720-50.C. (Water Quality Management Planning Regulation, Shenandoah-Potomac River Basin): Staff will ask the Board to adopt the proposed amendments to 9 VAC 25-720 (Water Quality Management Planning Regulation), regarding increased nutrient waste load allocations (WLAs) requested by Merck in Rockingham County, a significant discharger located in the Shenandoah-Potomac Basin.
Proposed amendments to increase the WLAs for both Merck and the FWSA-Opequon facilities were published 5/26/08 in the Virginia Register and the public comment period closed 7/25/08; a Public

Hearing was held 6/26/08. Based on comments received and further staff deliberations, staff intends to recommend the following for the Board's consideration:

Merck: Approve the proposed amendments to increase the nutrient WLAs, due to the technical infeasibility to meet the current WLAs. Based on public comment the associated "footnote" has been reworded to clarify that any potential further amendments would only result in a decrease to the WLAs and also clarify the scope and duration of the full-scale pilot project for nutrient reduction technology at the plant.

FWSA-Opequon: Disapprove the requested amendments to increase nutrient WLAs since the FWSA did not pursue the increased WLAs due to a plant expansion under the original rulemaking adopted by the Board in 2005 and the Shenandoah-Potomac is already estimated to be "over-allocated" for nitrogen. Further increases should be avoided when possible to aid in meeting and maintaining water quality standards. Further, the Authority has the capability to meet its "bubbled" allocation for the combined, expanded design flow of their facilities using the Nutrient Credit Exchange Program and available technology.

BACKGROUND

General Status of Waste Load Allocation (WLA) Revisions:

In late 2005, when the Board adopted nutrient WLAs for 125 significant dischargers in the Chesapeake Bay river basins, the DEQ Director was also authorized to: (1) receive any petition requesting amendment of the adopted nitrogen or phosphorus allocations on the Board's behalf, and (2) upon completion of the public comment period on the petition, proceed to initiate a rulemaking on any petition received. To date, staff has been involved in the following WLA amendments:

- DEQ-Initiated Technical Corrections = 1 approved (Tyson Foods-Temperenceville)
- Legal Appeal Submitted = 2; both pending (FCW&SA-Vint Hill, Omega Protein)
- Discharger Petitions for Amendments = 9
    - Approved = 3 (Tyson Foods-Glen Allen, Fredericksburg, Bear Island Paper)
    - Denied = 2 (Craigsville, Boston Water & Sewer)
    - Pending = 4 (FWSA-Opequon, Merck, New Kent Co., Louisa Co.-Zion Crossroads.)
- "Other" = 2. One is pending, involving ownership transfer and change in the nature of the site's industrial use (Pilgrims Pride-Alma). The other, which has subsequently been withdrawn, involved Culpeper Co. informally asking for consideration to extend the deadline for CTO issuance on their Mountain Run STP.

At this time, staff does not anticipate any additional petitions requesting higher allocations that would be approvable under the criteria used during the 2005 rulemaking process that established the nutrient allocations.

Subject Proposal: Two significant dischargers in the Shenandoah-Potomac River basin, the Frederick-Winchester Service Authority (FWSA)-Opequon Water Reclamation Facility and the Merck facility in Rockingham County, petitioned for increased nutrient WLAs. While both facilities seek increased allocations, the basis for the requests is different. The FWSA-Opequon petition requested that a larger design capacity be used as the basis for calculating the facility's allocation. Merck's petition requested that higher nitrogen and phosphorus concentrations, ones feasible to attain by the treatment facility, be used to set its allocations.

A complicating factor with these requests for higher nitrogen allocations is that the total delivered nitrogen load (from point and nonpoint sources) under the Shenandoah-Potomac's Tributary Strategy is already estimated to exceed the State's allocation commitment by about 212,000 pounds per year, and any further increase to individual facility allocations will add to this surplus unless an offset is identified.

Previous actions taken by the Board in this matter are:

- 3/8/07 meeting – in response to the petitions, a recommendation was approved to move forward with rulemaking to consider what the appropriate allocations should be for both facilities, and to proceed with the normal process that allows for full public participation and consideration of all information submitted during the NOIRA phase to aid in formation of the proposal.

- 12/4/07 meeting – recommendation approved to proceed to public hearing and comment on amendments to the Water Quality Management Planning Regulation, 9 VAC 25-720-50.C, as proposed (strike-though = deletion; underline = addition):
  1. For Frederick-Winchester S.A. Opequon:

VA Water Body ID	VPDES	Total Nitrogen WLA (lbs/yr)	Total Phosphorus WLA (lbs/yr)
B08R	VA0065552	~~102,331~~ *115,122*	~~7,675~~ *11,506*

Notes: (10) Opequon WRF – waste load allocations (WLAs) based on a design flow of 12.6 MGD. If plant is not certified to operate at 12.6 MGD design flow by 12/31/10, the WLAs will decrease to TN = 102,331 lbs/yr; TP = 7,675 lbs/yr, based on a design flow of 8.4 MGD.

  2. For Merck:

VA Water Body ID	VPDES	Total Nitrogen WLA (lbs/yr)	Total Phosphorus WLA (lbs/yr)
B37R	VA0002178	~~14,619~~ *43,835*	~~1,096~~ *4,384*

Notes: (11) Merck-Stonewall – waste load allocations will be reviewed and possibly modified based on "full-scale" results showing the treatment capability of the 4-stage Bardenpho technology at this facility.

If approved as requested, the total **discharged** nitrogen allocation for the Shenandoah-Potomac basin would be increased by 42,007 lbs/yr, and the total **discharged** phosphorus allocation by 7,119 lbs/yr. The estimated increases in the loads **delivered** to tidal waters are:

- FWSA-Opequon: - TN delivered load increase = 9,465 lbs/yr (0.74 delivery factor)
  - TP delivered load increase = 2,950 lbs/yr (0.77 delivery factor)
- Merck: - TN delivered load increase = 12,855 lbs/yr (0.44 delivery factor)
  - TP delivered load increase = 2,532 lbs/yr (0.77 delivery factor)

CURRENT STATUS
Proposed Regulatory Amendments published in the Virginia Register on 5/26/08.
Public Hearing held 6/26/08.
Public Comment Period closed 7/25/08; see summary of comments and staff response following.
SUMMARY OF COMMENTS AND STAFF RESPONSE:

- Frederick Winchester Service Authority **supports the proposed amendments for the Opequon plant.**
- Comments opposing the proposal:
  - Chesapeake Bay Foundation:
    - Violates Clean Water Act and State Water Control Law requiring inclusion of water-quality based effluent limits necessary to meet water quality standards in all VPDES permits.
    - Jeopardizes Bay cleanup; approval would set precedent for all future requests.
    - Exceeds point source cap, contravening the express directives of General Assembly and jeopardizes Virginia's Bay-cleanup commitment.
    - Nullifies the market-based underpinnings of the credit exchange program.
    - Places further demands on already aggressive nonpoint controls.
    - Proposed delay to address water quality standards concerns under the TMDL is unacceptable.
    - Socio-economic benefits of cap-maintenance and value of resources outweigh the biased and unsubstantiated findings in Dept. of Planning & Budget's Economic Impact Analysis. *[NOTE: The EIA stated the benefits likely exceed the costs for all proposed changes, especially regarding the action on the Merck allocations. The EIA went on to state that if the company is forced to be non-compliant, it is possible that Merck will choose to set up a plant elsewhere. A plant closing could cost Virginians jobs and negatively affect economic activity in the region.]*

        - State Water Control Law sets forth other feasible/economical options to meet WLAs, including credit exchange.
        - Also received 431 emails from CBF members and other citizens, opposing amendments for many of the above reasons.
    - Shenandoah Riverkeeper – concerned with inconsistency with applicable regulations, delayed restoration of local water quality and the Bay, and frustrating the basic mechanism of the credit exchange program. Concerned with lost opportunity to improve local conditions in impaired waters affected by fish kills
    - Trout Unlimited - exceeds pollution cap for the Shenandoah-Potomac; we should avoid delay and honor commitments for permanent nutrient pollution caps and fully restore water quality in the Bay and its rivers; we should require Merck and FWSA to find offsets or nutrient credits.
    - VA Watermen's Association – noted extent of impaired waters; that watermen and processors are impacted by an unhealthy Bay and their plight is worsened by new crabbing restrictions.
- DEQ Response to Significant Comments:
    - Use credit exchange, require offsets – The approach for setting initial WLAs was that each individual discharger could comply with an NRT retrofit at their own facility, using available technology at full design flow, without reliance on credit exchange. Setting Merck's WLAs based on concentrations their "treatability" study has shown aren't achievable is inconsistent with this approach. "Offsets" do not apply to Merck as it is neither a new nor expanding facility. However, FWSA does have the capability to meet its "bubbled" allocation for the combined, expanded design flow of their two facilities using credit exchange and available technology.
    - Basin loading cap for nitrogen already exceeded – Under the proposal recommended for approval, the exceedence above the total basin allocation for nitrogen would increase from about 212,000 pounds to 225,000 pounds (in delivered load). Because of the exceedence, consideration will be given to shifting allocations among nutrient sources in the Shenandoah-Potomac basin, and perhaps even among basins that have the same relative impact on Bay water quality, as we move forward with the Bay TMDL. The importance and magnitude of establishing basin allocations, and assigning sub-allocations to point and non-point sources, cannot be overstated. We are in the relatively early stages of a process that will be completed with EPA's adoption of the Bay TMDL. It should not be surprising to see relatively minor shifts in allocations – some up and some down – as the process unfolds toward establishing a firm "cap" under the TMDL.
    - Amendments will cause loads to increase – The proposed increase is 0.1% of the basin nitrogen allocation. The higher allocations for Merck will still result in significant reductions over the prior loads discharged. Merck's 2007 discharged nitrogen load was about 110,700 pounds; the requested allocation would be almost 66,900 pounds per year lower than what they are actually discharging.
    - Merck's technology options not fully explored – Most Shenandoah area dischargers are installing tertiary filtration to meet nutrient limits, especially for phosphorus control. Merck did not immediately plan to test filtration in their full-scale pilot project, since they have an additional clarifier available for the treatment train. Merck wants to evaluate the concentration levels and form of phosphorus that result with this additional unit on-line before looking into tertiary filtration. Other valley region dischargers don't have surplus clarifiers and that's why they're installing effluent filtration now.

CHANGES **MADE TO PROPOSAL**

1. **Merck**: The associated "footnote" for Merck's nitrogen and phosphorus WLAs has been revised to clarify the potential for any further amendments as well as the scope and duration of a full-scale pilot project for nutrient reduction technology at the plant, as follows:
   "Merck-Stonewall – waste load allocations will be reviewed and possibly ~~modified~~ reduced based on "full-scale" results showing the optimal treatment capability of the 4-stage Bardenpho technology at this facility, consistent with the level of effort by other dischargers in the region. The "full scale" evaluation will be completed by December 31, 2011 and the results submitted to DEQ."
2. **FWSA-Opequon**: The request for WLA amendments is not recommended for approval, and these

have been removed from the proposal. This change is based primarily on the fact that FWSA did not pursue the increased WLAs under the original rulemaking adopted by the Board in 2005. Plants actively involved in expanding at that time, with a "reasonable assurance" that a Certificate to Operate" would be secured by 12/31/10, were given conditional allocations for the higher design flow. This included the Authority's other facility, Parkins Mill STP, which was assigned WLAs based on an expanded design flow of 5.0 MGD. Instead, FWSA contended that Opequon's design flow for allocation purposes should account for the larger sizing (12.6 MGD) of just the biological treatment basins or be the highest flow tier in their discharge permit (winter, wet-weather tier of 16 MGD), both of which were disallowed by the agency. Subsequent to Board adoption of the nutrient WLAs in 9 VAC 25-720, FWSA petitioned for increased allocations based on their plans to undertake the expansion needed to get the full plant rating up to 12.6 MGD by December 31, 2010.
There is the additional concern over approving increased WLAs based on a plant expansion since the Shenandoah-Potomac basin is already estimated to be "over-allocated" for nitrogen, and further increases in WLAs should be avoided when possible to aid in meeting and maintaining water quality standards. Further, the Authority has the capability to meet its "bubbled" allocation for the combined, expanded design flow of their facilities using the Nutrient Credit Exchange Program and available technology.

Approval of Revisions; Virginia Water Protection (VWP) Permit Program Regulation 9 VAC 25-210 *et seq*.: At the October 16, 2008 State Water Control Board meeting, staff will recommend that the Board approve revisions to the Virginia Water Protection Permit regulation. Should the Board approve these revisions, the final regulation will published in the Virginia Register and become effective on or about December 10, 2008. The proposed revisions to the Virginia Water Protection Permit Program Regulation are the result of statute changes passed by the Virginia General Assembly in 2008 that added an exclusion from Virginia Water Protection permitting to the State Water Control Law in § 62.1-44.15:21 H (Impacts to Wetlands). In summary, no VWP permit is required for the construction and maintenance of agricultural or silvicultural ponds or impoundments that meet specific criteria in the Virginia Soil and Water Conservation Board code § 10.0-604 *et seq*. In order to be consistent with the statute, Sections 50, 60, 130, and 220 of the VWP regulation need to be revised. Additionally, several processing forms used by the VWP program were updated, and thus, the Forms section of the regulation was also revised to note the correct form versions. Because the proposed revisions are a matter of regulatory housekeeping, the Administrative Process Act does not require a public participation process, and thus, a Notice of Intended Regulatory Action (NOIRA) was not published in the Virginia Register.

Adoption of Amendments to the Water Quality Standards Regulation (9 VAC 25-260) – Triennial Review: Staff will ask the Board to adopt the proposed Triennial Review amendments to the Virginia Water Quality Standards regulation. Based upon public comment, staff has concluded that, in addition to the changes documented in the regulatory text, the following key actions are appropriate:

- retain the existing E. coli bacteria criteria of 126 CFU/100 ml for freshwater recreation;
- add to section 310, at the request of the City of Richmond and in recognition of their Long Term Control Plan for their CSO, a special standard "ii" for E. coli bacteria for the months of May through September in a portion of the tidal James River below the fall line based on a risk level of 1% [geometric mean criteria of 206 CFU/100 ml];
- reconvene the triennial review ad hoc advisory committee (TAC) to further consider: 1) updates to aquatic life criteria for ammonia, copper, cadmium, cyanide and lead in section 140; and, 2) the prohibition of any new or expanded mixing zones for persistent bioaccumulative toxic substances in section 20; and,
- form an ad-hoc advisory group to assist agency permitting staff in the development of guidance on application of the section 30 Antidegradation Policy to Tier I waters.

In addition, the proposed amendments to the regulation include five revisions first introduced for public comment at the public hearings since they were identified subsequent to the June 2007 Board meeting where staff received authorization to proceed to Notice of Public Comment with proposed amendments.

BACKGROUND

Water quality standards are the cornerstone for water quality programs, as these standards are used to set pollution limits in discharge permits and evaluate the health of waters statewide.

Water quality standards define the goals for healthy waters by designating their uses, setting water quality conditions that will protect those uses and establishing provisions to safeguard high quality waters. They protect water quality so rivers, lakes and other water bodies can be sources of water supplies; support recreational, agricultural, and industrial activities among others; promote the growth of fish and shellfish that are suitable for eating; and protect aquatic life.

The Clean Water Act and State Water Control Law require that every three years the Board conduct a review of the state surface water quality standards regulation for the purposes of revising and updating the standards to reflect changes in law, technology and information. The goal is to provide the citizens of the Commonwealth with a technical regulation that is protective of water quality in surface waters, reflects recent scientific information, reflects agency procedures and is reasonable and practical.

PURPOSE

Staff will ask the Board to adopt triennial amendments to the Water Quality Standards regulation.

At their June 27, 2007 quarterly meeting, the State Water Control Board authorized staff to proceed to public hearing with proposed triennial review amendments to the Water Quality Standards, including the following items:

- a narrative criterion to recognize that certain waters (Class VII Swamp Waters) are naturally low in dissolved oxygen and pH;
- updates to the toxics criteria to protect human health and aquatic life;
- updates to the bacteria criteria, including the presentation of two bacteria criteria options calculated using two different risk levels, both of which are acceptable to the Environmental Protection Agency (EPA); and,
- special standards to reflect site specific conditions.

In addition, staff introduced five issues for public comment that were identified subsequent to the June 2007 Board meeting. The Virginia Department of Health (VHD) submitted three requests that were not received in time to present to the Board at the June 27 meeting: 1) revised wording in section 160 for the fecal coliform criteria for shellfish waters to reflect changes the VDH Shellfish Sanitation Division is making in their testing method to conform with the National Shellfish Sanitation Program; 2) revised designation boundaries for 17 Public Water Supplies (PWS); and, 3) for security reasons, deletion of the latitude/longitude coordinates for 15 PWS intakes. In addition, staff included updates to the lake nutrient criteria in sections 50 and 187 that are considered reasonable but could not be proposed until the regulatory amendments for

lakes became effective in August 2007. Finally, several minor corrections are suggested in section 140, Table of Parameters, regarding the units and Chemical Abstract Service number for some parameters.

RESPONSE TO PUBLIC COMMENT

During the public comment period (March 31 – May 30, 2008), three public hearings were held in Roanoke, Richmond and Virginia Beach. Board members Shelton Miles, John Thompson, and Robert Wayland each presided over a hearing. In addition to the proposed amendments, the public was also provided with a copy of the Department of Planning and Budget's Economic Impact Statement for the proposal.

At the hearings, DEQ staff alerted the public of a new development that occurred after the Board had approved the options for public comments. New information from the EPA indicated that a change in the bacteria standard would allow higher bacteria limits in discharge permits for wastewater treatment plants. While DEQ had originally not taken a position on the options for the bacteria criteria, it never intended that higher discharge limits would result. DEQ indicated that this concern would be shared with the Board when it considers the proposed changes to the water quality standards.

Written comments on the triennial review changes were received from 34 organizations, localities and agencies, and 8 letters and approximately 600 emails from individuals. The issue that attracted the most comment was the bacteria options, with all of the 8 letters and 600 emails from individuals opposing the option of the higher criteria. Of the organizations, localities and agencies commenting on the bacteria

criteria, four also opposed the higher criteria, and 20 supported the higher criteria. Opponents are concerned that the higher criteria would result in additional gastrointestinal illnesses among the public recreating in Virginia waters.

The key changes in response to public comment and other key issues are summarized below in the order of the sections in the regulation:

§ 9 VAC 25-260-20, General Criteria and Mixing Zones

Comment: The Chesapeake Bay Foundation opposed continuation of VPDES permitting policies authorized by existing standards for mixing zones and urged revision of the proposal to prohibit any new or expanded mixing zones for persistent bioaccumulative toxic substances.

Response: DEQ will recommend that the Board direct staff to reconvene the TAC to consider the prohibition of any new or expanded mixing zones for persistent bioaccumulative toxic substances.

§ 9 VAC 25-260-30 Antidegradation Policy

Comment: The Chesapeake Bay Foundation opposed continuation of the VPDES permitting policy of a holistic approach toward antidegradation and urged revision of the proposal to require the application of the antidegradation policy to Tier I waters for all pollutants using a pollutant-by-pollutant approach.

Response: DEQ will recommend the Board direct staff to form an ad-hoc advisory group to assist agency permitting staff in developing guidance on application of § 9 VAC 25-260-30, Antidegradation Policy, to Tier I waters.

§ 9 VAC 25-260-140, Criteria for Surface Waters

Comments:

1. The Virginia Association of Municipal Wastewater Agencies (VAMWA) and others requested that the proposed updates to aquatic life criteria for cadmium and lead be put on hold until the TAC used for the triennial review of the water quality standards regulation could be reconvened to:

- review recent literature that was unavailable when EPA updated the cadmium criterion to determine if these data should be used to recalculate the cadmium criterion; and,
- review whether the conversion factor recommended by EPA for use with their lead criteria may not be accurately applicable to the Virginia criteria, due to the differences in the underlying toxicity data that are the basis for the differences between the EPA and Virginia criteria for lead.

Note: TAC members representing the groups that provided comments about lead and cadmium also recommended during the TAC meetings that recent literature now available since EPA's last revision of the aquatic life criterion for cyanide should also be evaluated to determine if the cyanide criterion should be updated to incorporate the new information.

2. Although the aquatic life criteria for ammonia and copper were not proposed for amendment, the USFWS requested that recent new data be evaluated by a reconvened TAC to determine if aquatic life criteria for these two parameters should be recalculated using the new data to protect endangered species of mussels.

Response: Completing review of the new information for these five criteria during the initial TAC process would have delayed the triennial review rulemaking for all of the proposed amendments, including some time sensitive issues related to the TDML program. DEQ will recommend that the Board direct staff to reconvene the TAC to consider updates to aquatic life criteria for ammonia, copper, cadmium, cyanide and lead.

§ 9 VAC 25-260-170, Bacteria, Recreational Waters

Comment: A substantial number of public comments (over 600 comments) were submitted in opposition to relaxation of the E. coli criteria for freshwater recreation use. Comments supporting the higher E. coli criteria were received from VAMWA, thirteen of its members, and several other entities.

The key points made in support of retaining the lower, existing bacteria criteria include:

- Significant public comment was submitted that supports cleaner and safer waters within the Commonwealth and believes that raising the criteria is going in the wrong direction.
- The Virginia Department of Health decided to remain neutral on the issue, neither supporting nor opposing the increase in the illness rate.
- Citizens commented that insufficient scientific data are available to justify raising the existing criteria.

The key points made in support of the higher bacteria criteria include:

- The risk level for potential gastrointestinal illness under the existing saltwater criteria is greater than the risk using either of the freshwater criteria options. In saltwater, the potential gastrointestinal illness rate is 19 per 1000 swimmers versus 10 per 1000 swimmers in freshwater at the higher bacteria criteria, and 8 per 1000 swimmers at the lower bacteria criteria. Most of the popular beaches in Virginia are located in saltwater.
- The higher bacteria criteria of 206 CFUs per 100 milliliters is not considered a significant increase from the existing criteria of 126 CFUs per 100 milliliters. Either criteria are considered protective by the EPA for primary contact recreation [swimming]. If a state proposed setting a bacteria criteria higher than 206 CFUs per 100 milliliters, then EPA would require submission of additional justification and data before it would consider approving a criteria higher than the acceptable range.
- If the higher bacteria criteria are selected, the Board could consider adopting a special condition that requires effluent limits for wastewater treatment plants to meet the existing, lower bacteria criteria of 126. This would ensure there was no backsliding on the current level of wastewater treatment provided.
- Initial estimates indicate that under the higher bacteria criteria 10 to 15% of state waters would no longer be considered impaired as they would be under the lower bacteria criteria. *[Therefore, approximately 150 to 225 TMDLs would not be needed over the next decade, with a resulting savings of about $4-8 million in TMDL and implementation plan development costs. In addition, based upon extrapolated cost estimates included in a limited number of TMDL Implementation Plans, another $350 to $500 million may be saved since implementation of best management practices for non-point sources to restore these waters would no longer be needed.]* Also, comments noted the massive undertaking needed to meet the bacteria criteria statewide and included an estimate of a statewide cost of $36 billion. Thus, every effort should be taken to focus on the most critical clean-up needs.

Response: DEQ will recommend that the Board retain the current bacteria criteria values and only approve revisions to the structure of the bacteria criteria to more closely reflect EPA recommendations, such as using the geometric mean criteria as the environmentally relevant endpoint.

EPA has indicated that risk levels in the 0.8% to 1.0% range are all protective of primary contact recreation in freshwater. An 0.8% risk level results in the current criteria of E. coli bacteria not to exceed a monthly geometric mean of 126 CFU/100 ml, while the 1.0% risk level results in a higher criteria of E. coli bacteria not to exceed a monthly geometric mean of 206 CFU/100 ml. While EPA will approve a state's water quality standards for bacteria in freshwater with a risk level within the range of 0.8% to 1.0%, the choice of the risk level is a policy decision for the state.

EPA also acknowledges the existing criteria are more than 20 years old and since then scientists have learned much about molecular biology, virology, and analytical chemistry. EPA has publicly announced it is conducting a thorough review of the national bacteria criteria, with plans to complete the review and publish new or revised criteria by 2012.

Staff agrees with comments that the TMDLs developed to meet the existing bacteria criteria call for very significant reductions in bacteria inputs from non-point sources; many believe these reductions are not attainable. Comments received from the VA Department of Conservation and Recreation support that concern. They indicate that with current technology and available BMPs for agricultural lands, bacteria can be reduced, at best, 80 to 90%, while the TMDLs generally call for reductions in the 95 to 100% range. They note the only options available to meet the higher reductions would be to reduce or eliminate livestock from these watersheds or utilize storm water retention ponds to capture and treat all the runoff. The extremely high cost estimates included in some comments reflect statewide extrapolation of the costs to install these other options. In response to these concerns, staff believes the use of the geometric mean criteria as the endpoint in TMDLs should call for more reasonable bacteria reductions.

The projected, additional costs noted by those supporting the higher criteria can be significantly reduced, or eliminated, by re-scheduling completion dates for the TMDLs needed for the waters

that remain impaired under the lower criteria. For example, development of those TMDLs can be scheduled after EPA's planned publication of new bacteria criteria in 2012 to give the DEQ and the Board time to consider any adjustment to the bacteria criteria based on new national recommendations supported by the most recent scientific data. In the interim, TMDL work can
focus on those waters for which there is no question the bacteria impairments need to be addressed. Staff acknowledges the strong positions taken by those submitting comments favoring one of the bacteria options over the other. Given that the basis for the acceptable range of the bacteria criteria is over twenty years old and that EPA is working towards publication of new or revised criteria based upon present day knowledge of public health impacts from water borne disease, staff believes a prudent course is not to recommend changing the statewide criteria at this time. In the interim, staff will schedule development of TMDLs for those impaired waters most in need and will continue to encourage implementation work that will improve water quality.

As an additional matter, Section 62.1-44.15.(3a) of the Code of Virginia requires DEQ to notify the General Assembly committees when the agency is proposing regulations more stringent than federal requirements. EPA allows states to select bacteria criteria within a range of values that is protective of public health and some citizens view retaining the existing criteria at the lower end of the range to be more stringent than federal requirements. Therefore, even though there may be some debate whether adopting criteria within the acceptable range is more stringent than federal requirements, the agency notified the appropriate General Assembly committees in order to ensure the intent of the Code of Virginia is met.

§ 9 VAC 25-260-310

Comment: The City of Richmond submitted comments that recommend the Board adopt the higher bacteria criteria as a special standard for a segment of the James River below the City if the Board decides not to adopt the higher criteria for all Virginia freshwaters. The City indicated that in order to continue implementing its Long Term Control Plan for their Combined Sewer System it needs a determination on the bacteria criteria as soon as possible. To date, a total of $256 million in local, state and federal funds has been invested in implementing the Plan, and the City of Richmond has committed to spend between $352 – 422 million (2006 dollars) for Phase III, which will complete implementation of the Plan. The City needs to know that spending the additional funds will result in compliance with water quality standards once the projects included in the Plan are completed.

The City's comments also referred to the Special Order with the Board, effective March 17, 2005, regarding implementation of a plan to control combined sewer overflow discharges to the James River. The City referred to the following item under Section D of the Order:

> "2. The Board accepts the City's January 2002 LTCP and approves the CSO Control Plan E, as described in the LTCP subject to the Board completing its ongoing water quality standards coordination process pursuant to Section III of the CSO Policy and the Board's determination that the recommended plan makes the water quality standards compliance demonstration called for in Section II.C.4.b.i and ii of the CSO Policy."

The City indicated that when the State Water Control Board approved the Order at its August 31, 2004 meeting, the Board chair "directed staff to complete the water quality standards coordination process with this triennial review of the standards and that request is documented in the City's CSO Special Order." The City also presented information to show that under full implementation of CSO Control Plan E, water quality standards will only be attained if significant reductions are also achieved in other bacteria sources in the Richmond region; the City states such reductions are unattainable.

Response: Staff plans to recommend adoption of a special bacteria standard for the James River below Richmond.

DEQ has conducted the water quality standards coordination process in accordance with EPA's CSO Policy both before and after the Special Order between the Board and the City was signed. For example, DEQ worked with the City during development of the Long Term Control Plan to ensure the public was involved and aware of the process. In addition, during the TAC meetings under this triennial review

process, the need for a special standard for the James River due to the Richmond CSO program was discussed. The EPA CSO Policy recognizes that a state may adopt site-specific criteria for a particular pollutant if the State determines that the site-specific criteria fully protect the designated uses. Based upon the modeling of the James River done by the City, once the Long Term Control Plan is completed, the river cannot achieve the existing E. coli criteria of 126 CFU/100 ml, but it can achieve the higher criteria of 206 CFU/100 ml, both of which are acceptable to EPA to protect primary contact recreation. This analysis presumes bacteria inputs from other sources remain at current levels.
The City has indicated they need to know before additional expenditures of significant funds are made that standards will be achieved once the Long Term Control Plan is completed, independent of whether reductions from other bacteria sources are achieved or not.
Staff recognizes that adoption of special criteria at this time provides the City the greatest assurance their enormous investments will ultimately result in water quality standards compliance. Since a delay in implementation of the Long Term Control Plan is an outcome no one desires, adoption of the special standard now also allows the City to maintain its accelerated pace of implementation.
The two other CSO communities in the Commonwealth, the Cities of Lynchburg and Alexandria, did not submit comments requesting a special bacteria standard. However, staff recognizes, especially due to the high costs involved with implementing the Long Term Control Plans, all three of the CSO communities need to be treated consistently with respect to water quality standards compliance issues. As the Long Term Control Plans and the TMDLs are
implemented in these other communities, monitoring progress towards water quality standards compliance will be used to help determine whether any future actions regarding water quality standards may be needed.

Reissuance of the General VPDES Permit for Discharges of Storm Water Associated With Industrial Activity (VAR05) (9 VAC 25-151): The purpose of this agenda item is to request that the Board authorize the staff to issue a public notice and hold a public hearing on a draft regulation for the subject general permit. This regulation will reissue the existing general permit for industrial activity storm water discharges that was originally adopted by the Board in 2004, and which will expire on June 30, 2009. This draft is generally modeled after EPA's proposed 2006 Multi-Sector General Permit. The significant revisions to the regulation are as follows:

1. Definitions. Modified the "Industrial activity" definition category 5 (Landfills, land application sites, and open dumps) to add "debris/wastes from DCR VSMP regulated construction activities/sites". Deleted the definitions for "Large and medium municipal separate storm sewer system" (MS4) and "Small municipal separate storm sewer system" since the MS4 permitting program is now a DCR program.
2. Authorization to discharge - "Authorized Non-Storm Water Discharges". Deleted the phrase "provided the nonstorm water component of the facility's discharge is in compliance with 9 VAC 25-151-70, Part III D 2", and included that requirement in the storm water pollution prevention plan (SWPPP) portion of the permit. Item d. (Uncontaminated air conditioning or compressor condensate): added "excluding air compressors".

Authorization to discharge - "Limitations on coverage". Removed subsection 3 b since the permit already has a special condition on "Water Quality Protection" (Part I B 8) that addresses water quality standards violations as a permit condition. Removed subsection 3 d (TMDL section) and included a special condition in the permit (Part I B 7) for facilities that discharge to TMDL impaired waters. Added subsection 5 stating that "Storm water discharges associated with construction activity that are regulated under DCR's VSMP permit program are not authorized by this permit." In Table 50-1 (Sectors of industrial activity covered by this permit), removed SIC codes 3271 and 3272 (concrete products facilities) from the list of authorized facilities since they are now covered under their own general permit.

3. Registration Statement and SWPPP. Clarified that the SWPPP must be prepared and implemented prior to the submittal of the registration statement, and that existing permittees who intend to continue coverage under this GP must review and update the SWPPP to meet any new

permit requirements prior to submitting their registration statement. Removed the requirement for additional notification for discharges to MS4s since the NPDES MS4 permitting program is now administered by DCR.
Registration statement contents. Asked for the name, address, etc. for (1) the site property owner; (2) the operator applying for permit coverage; and (3) the party who will be legally responsible for the permit. Removed the requirement that the applicant tell us if the SWPPP has been prepared. Deleted the topographic map submittal requirement, and required that the site map and general location map from the permit SWPPP (as revised for this reissuance) be submitted with the registration statement. If the applicant's facility is a landfill, asked them to tell us the type of landfill. If the facility is a timber products operation, asked them to identify any outfalls that receive discharges from wet decking areas.
4. Termination of permit coverage. Removed the requirement that the termination notice has to be filed within 30 days after they meet one of three possible conditions (the owner can now file the notice anytime).
5. General permit.
Part I A - Effluent Limitations, Monitoring Requirements and Special Conditions.

- 1. Monitoring. Broke the monitoring into three sections: (1) quarterly visual monitoring; (2) benchmark monitoring for specific industrial activities; and (3) compliance monitoring for facilities subject to numerical effluent limitations.
  - Quarterly Visual Monitoring. Clarified that if no qualifying rainfall event occurred "during daylight hours" for that quarter, the permittee is excused from the quarterly visual monitoring that quarter. For inactive and unstaffed sites, clarified the monitoring waiver to add that there must be "no industrial materials or activities exposed to storm water" for them to qualify for this waiver. Moved the Representative Outfalls section up from the Part I A 2 "Monitoring Instructions" section. Added a section to indicate when the monitoring starts if the facility's permit coverage is effective less than a month from the end of a monitoring period.
  - Benchmark Monitoring. Updated Table 70-1 to show the industrial sectors that had monitoring requirements added (sectors I, P, R, AC, and AD), and the revised benchmark monitoring parameters. TSS benchmark monitoring was added to those sectors that had a benchmark monitoring requirement in the previous permit, but didn't have TSS as a parameter. Clarified that benchmark monitoring must be performed at least once during at least the first two, and potentially all monitoring periods, unless they qualify for a waiver; defined the monitoring periods; added a section to indicate when the monitoring starts if the facility's permit coverage is effective less than a month from the end of a monitoring period. Clarified that benchmark monitoring waiver requests will be evaluated by DEQ based upon (1) benchmark monitoring results below the applicable benchmark concentration values; (2) a favorable compliance history (including inspection results); and (3) no outstanding enforcement actions. Also added that the benchmark monitoring waivers may be revoked by DEQ for cause. Clarified the monitoring waiver for inactive and unstaffed sites to add that there must be "no industrial materials or activities exposed to storm water" for them to qualify for this waiver. Moved the Representative Outfalls section up from the Part I A 2 "Monitoring Instructions" section.
  - Compliance Monitoring For Discharges Subject To Numerical Effluent Limitations. Broke this into three subsections: (a) facilities subject to storm water effluent limitation guidelines; (b) coal pile runoff monitoring; and (c) facilities subject to "total maximum daily loads" (TMDL) waste load allocations.
    (a) Facilities subject to storm water effluent limitation guidelines. Clarified that monitoring must be performed at least once during each of the monitoring periods; defined the monitoring periods; added a section to indicate when the monitoring starts if the facility's permit coverage is effective less than a month from the end of a monitoring period.
    (b) Coal Pile Runoff Monitoring. Clarified that monitoring must be performed at least once during each of the monitoring periods; defined the monitoring periods; added a section to

indicate when the monitoring starts if the facility's permit coverage is effective less than a month from the end of a monitoring period.
(c) Facilities subject to TMDL waste load allocations (WLAs). Facilities will be given written notification from DEQ that they are subject to TMDL monitoring. Required the monitoring to be conducted at least semi-annually; defined the monitoring periods; indicated when the monitoring starts if the facility is notified that they are subject to the TMDL monitoring requirements less than a month from the end of a monitoring period.

- 2. Monitoring Instructions. Deleted the Monitoring Periods subsection and moved it to each of the individual monitoring sections. Moved the Representative Outfalls subsection to the quarterly visual monitoring and benchmark monitoring sections since that provision only applies to those types of monitoring. Added a requirement that a facility document in the SWPPP any inability to obtain a sample, of no rain event, or of no "measurable" storm event.
- 3. Monitoring waivers. Deleted the alternative certification of "not present" or "no exposure" to be consistent with EPA's proposed 2006 MSGP.
- 4. Reporting Monitoring Results. For effluent limitation monitoring, changed the DMR due date to January 30th. Added a section requiring TMDL WLA monitoring to be submitted by July 30th and January 30th. Changed the benchmark monitoring section to require monitoring to be submitted on a DMR by January 30th. Added a follow-up monitoring section requiring this monitoring to be submitted on a DMR no later than 30 days after the results are received. Added a significant digits section to discuss the number of significant digits to report the monitoring data to.
- 5. Corrective Actions. Added this section that describes actions that the permittee must take if (a) benchmark monitoring results exceed benchmark monitoring concentrations; (b) routine facility inspections, comprehensive site compliance evaluations, facility inspections, or other observations result in discovery of a deficiency; or (c) there is an exceedance of an effluent limitation, TMDL wasteload allocation or a water quality standard. For exceedances of an effluent limitation, TMDL wasteload allocation or a water quality standard, the permittee must conduct follow-up monitoring and reporting on the schedule set in the permit until the results indicate that the limitation/allocation/standard is no longer being exceeded.

<u>Part I B - Special Conditions</u>

- 1. Allowable Non-storm Water Discharges. Deleted the phrase "provided the nonstorm water component of the discharge is in compliance with Part III D 2 (Nonstorm water discharges) of this general permit:", and included that requirement in the SWPPP portion of the permit (Part III D 3). Added a list of the non-storm water discharges from the Sector Specific SWPPP section (Part IV) that are specifically not authorized by the permit.
- 6. Salt storage piles. Added a requirement for the permittee to implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the salt pile. Added a requirement for all salt storage piles to be located on an impervious surface, and a requirement that all runoff from the pile, and/or runoff that comes in contact with salt, including under drain systems, be collected and contained within a basin lined with concrete or other impermeable materials. The lined basin must be bermed and sized to contain runoff resulting from a 24 hr 25 year storm event. Salt contaminated stormwater is not allowed to be discharged directly to the ground or to state waters.
- 7. Discharges to Waters Subject to TMDL WLA's. Added this special condition requiring facilities that are an identified source of the pollutant of concern to TMDL waters (Board established and EPA approved prior to the term of the permit) to incorporate measures and controls into their SWPPP to address the TMDL requirements, and any waste load allocations that impact the facility. DEQ will notify the permittee that they are subject to the TMDL requirements. If the TMDL establishes a specific WLA that applies to the facility's discharges, the permittee must address that allocation in the SWPPP, perform TMDL monitoring, and implement measures to meet the allocation.

- 8. Water Quality Protection. Added "an excursion above a TMDL waste load allocation" to the list of things that the Board may potentially take action on.
- 9. Adding/deleting Storm Water Outfalls. Added this special condition to allow the permittee to add or delete storm water outfalls at the facility as necessary or appropriate. The permittee has to update the SWPPP and notify DEQ of the change within 30 days of the change.

Part II - Conditions Applicable to All VPDES Permits

- Duty to Reapply. To be consistent with the Registration Statement section, changed the time to submit a registration statement to reapply for permit coverage from 180 to 90 days prior to the expiration date of the permit.

Part III - Storm Water Pollution Prevention Plan

- Deadlines for Plan Preparation and Compliance - Facilities That Were Covered Under the 2004 ISWGP. Changed the deadline to update and implement any revisions to the SWPPP to "prior to submitting the registration statement".
- Contents of the Plan
  - Site Map. Added the following things to show on the map: size of the property; location and extent of significant structures and impervious surfaces; locations of all storm water conveyances; location of any salt piles; and the location of any MS4s the facility discharges to.
  - Sampling Data. Clarified that the summary of existing sampling data is for storm water sampling data, and stated that, at a minimum, the summary must include data from the previous permit term.
  - Storm Water Controls. Extensively rewrote "a" and the introduction to "b" to conform to changes EPA made in their proposed 2006 MSGP. Eliminated the subsection headings of "(1) Nonstructural BMPs" and "(2) Structural BMPs", and listed all the BMPs types that must be implemented under subsection "b". Edited the BMP descriptions to conform to the changes EPA made in their proposed 2006 MSGP. Kept the inspection frequency for routine facility inspections at "a minimum of quarterly". Waived the routine facility inspection requirement for facilities that maintain an active E3/E4 status with DEQ. Changed the time period to correct deficiencies in the implementation of the SWPPP from 14 days to 30 days to be consistent with the Part I A 5 (Corrective Actions) requirement.
- Maintenance. Added a requirement that storm water BMPs be observed during active operation to ensure they are operating properly. Modified the remainder of the section to conform to changes EPA made in their proposed 2006 MSGP.
- Non-storm Water Discharges. Moved the certification of non-storm water discharges requirement to the Part III E "Comprehensive Site Compliance Evaluation" section (Part III E 1 h). Added subsection D 3 that states that all non-storm water discharges are subject to all the provisions of this permit, including numeric effluent limitations, benchmarks and monitoring requirements.
- Comprehensive Site Compliance Evaluation. Added the following things for facility personnel to evaluate: (1) evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring; (2) review of training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs; and (3) Certification of outfall evaluation for unauthorized discharges (this had been in the Part III C non-storm water discharges section). Changed this to an annual certification. Removed the provision allowing the permittee to skip the certification if they previously did a certification and believed nothing had changed at the facility. If the permittee fails to do the certification, they must notify DEQ of the reason within 14 days after completion of the annual site compliance evaluation.
- SWPPP Modifications. Changed the time to complete revisions from 14 days to 30 days to be consistent with the Part I A 5 (Corrective Actions) requirement. Deleted the subsection which allowed the permittee to use the annual site compliance evaluation to satisfy a routine facility inspection where the schedules overlapped.

- Maintaining an Updated SWPPP. Added the following conditions specifying when the SWPPP needs to be reviewed and, if appropriate, amended: (1) there is a spill, leak or other release at the facility; (2) there is an unauthorized discharge from the facility; and (3) the DEQ notifies the permittee that a TMDL has been developed and applies to the facility. Added a subsection specifying when SWPPP modifications need to be made. Added a subsection requiring specific information to be included if the SWPPP modification is based on a release or unauthorized discharge.
- Special Pollution Prevention Plan Requirements. Consistent with EPA's proposed 2006 MSGP, deleted this section, which dealt with additional requirements for facilities discharging through MS4s, and for facilities subject to EPCRA § 313 reporting requirements.

Part IV - Sector Specific Permit Requirements

- Renamed "Monitoring Cut-off Concentrations" to "Benchmark Concentrations". Added benchmark monitoring for TSS to all sectors that had benchmark monitoring in the previous permit if they didn't already have TSS monitoring.
- Sector A - Timber Products. Added benchmark monitoring for Phenols to "Wood Preserving Facilities" (SIC 2491) to be consistent with EPA's proposed change.
- Sector C - Chemical and Allied Products. Added benchmark monitoring for Zinc to "Industrial Inorganic Chemicals Facilities" (SIC 2812-2819) to be consistent with EPA's proposed change.
- Sector F - Primary Metals. Changed the routine facility inspection frequency from quarterly to monthly to be consistent with EPA's proposed change.
- Sector G - Metal Mining. Added the following to the description of covered discharges: (1) storm water discharges from exploration and development of metal mining and/or ore dressing facilities; and (2) storm water discharges from facilities at mining sites undergoing reclamation. Added the EPA definition of Final Stabilization. Added a section on "Clearing, Grading and Excavation Activities" from EPA's 2006 proposed MSGP. Deleted the separate section for "Inactive mining facilities" and included them in the section for "Active and temporarily inactive facilities". Added a section for "Termination of permit coverage" from EPA's 2006 proposed MSGP. Deleted the benchmark monitoring requirements for discharges from waste rock and overburden piles from Table 150-1, and put them in a new Table 150-2. Deleted the benchmark monitoring for Manganese to be consistent with EPA's proposed change. Changed old Table 150-2 to Table 150-3.
- Sector I - Oil and Gas Extraction and Refining. Changed the routine facility inspection frequencies to monthly (two places) to be consistent with EPA's proposed change. Added benchmark monitoring for Lead, Nickel, Zinc, TKN, Total Nitrogen, and TSS to "Oil Refining Facilities" (SIC 2911) to be consistent with EPA's proposed change.
- Sector L - Landfills. Deleted the definitions of "Land treatment facility", "Landfill", and "Surface Impoundment" to be consistent with EPA's proposed change.
- Sector M - Automobile Salvage Yards. Added mercury switches to the list of things to inspect for leaks, and to train personnel on the proper handling of.
- Sector N - Scrap Recycling and Waste Recycling Facilities. Added requirements for mercury switch removal, inspection and spill clean-up as per EPA's 2006 proposed MSGP. For scrap recycling and waste recycling facilities (both types), changed the inspection frequency from quarterly to monthly to be consistent with EPA's proposed changes. For facilities engaged in "Ship Dismantling, Marine Salvaging and Marine Wrecking" (SIC 4499), added benchmark monitoring for Aluminum, Cadmium, Chromium, Iron, Lead and Zinc, and TSS.
- Sector P - Land Transportation and Warehousing. Added benchmark monitoring for TPH and TSS.
- Sector R - Ship and Boat Building or Repair Yards. Added benchmark monitoring for TSS.
- Sector S - Air Transportation. Added benchmark monitoring for COD.
- Sector U - Food and Kindred Products. Changed the routine facility inspection frequency to monthly to be consistent with EPA's proposed changes. Added benchmark monitoring for BOD_5 and TSS to "Dairy Products Facilities" (SIC 2021-2026).

- Sector Y - Rubber Product Manufacturing Facilities. Added benchmark monitoring for Lead to be consistent with EPA's proposed change.
- Sector AC - Electronic, Electrical Equipment and Components, Photographic and Optical Goods. Added benchmark monitoring for Copper, Lead and TSS to "Electronic and Electrical Equipment and Component Facilities" (Except Computers) (SIC 3612-3699) to be consistent with EPA's proposed changes.
- Sector AD - Non-classified Facilities/Storm Water Discharges Designated by the Board. Added benchmark monitoring for TSS.

Report on Significant Noncompliance: Two permittees were reported to EPA on the Quarterly Noncompliance Report (QNCR) as being in significant noncompliance (SNC) for the quarter ending March 31, 2008. The permittees, their facilities and the reported instances of noncompliance are as follows:

1. Permittee/Facility: **Ronile, Inc., Ronile Wastewater Treatment Facility**
   Type of Noncompliance: **Failure to Meet Permit Effluent Limit for Oil and Grease**
   City/County: Rocky Mount, Virginia
   Receiving Water: Pigg River
   Impaired Water: The Pigg River is listed on the 305(b) report as impaired due to fecal coliform and *e* coli contamination. The sources of the impairments are listed as wildlife, livestock, pets, septic systems, domestic sewage sources and urban runoff.
   River Basin: Roanoke and Yadkin River Basins
   Dates of Noncompliance: October 2007 and February 2008
   Requirements Contained In: VPDES Permit
   DEQ Region: West Central Regional Office
   Due to the intermittent nature of the violations, the fact that the company is currently in compliance with all effluent limits, the expeditious manner in which the violations were investigated and ultimately addressed (the company believes that the violations may have been caused by a leaking pump seal which has been repaired) and the fact that no environmental damage was noted as a result of the violations, the staff of the West Central Regional Office have determined that enforcement action is not warranted in this matter.
2. Permittee/Facility: **City of Franklin, Franklin Sewage Treatment Plant**
   Type of Noncompliance: **Failure to Meet Permit Effluent Limits for Total Recoverable Copper**
   City/County: Franklin, Virginia
   Receiving Water: Blackwater River
   Impaired Water: While portions of the Blackwater River have been listed as impaired due to, variously, fecal coliform and *e* coli contamination, mercury contamination, low dissolved oxygen and impairment of benthic and macroinvertebrate communities, the portion of the River into which the Franklin Sewage Treatment Plant discharges is not listed as impaired in the draft 2008 305(b) report.
   River Basin: Chowan River, Dismal Swamp and Albemarle Sound Basins
   Dates of Noncompliance: Quarter ending December 31, 2007 and Quarter ending March 31, 2008
   Requirements Contained In: VPDES Permit
   DEQ Region: Tidewater Regional Office
   The City has completed a Water Effects Ratio study the results of which have allowed the Department to adjust the City's copper limits. The City is anticipated to be able to consistently meet these adjusted limits, which took effect in May of 2008. That being the case, the staff of the

Tidewater Regional Office have determined that enforcement action is not necessary in this matter.

Leisure Capital Corporation, Louisa County - Consent Special Order with Civil Charges – Issuance: Shenandoah Crossing is a resort facility. Leisure Capital Corporation purchased a portion of the property at Shenandoah Crossing Resort, a part of which included the Sewage Treatment Plant. The resort is operated by Shenandoah Community Resort Association, Inc., an owner controlled association. The Sewage Treatment Plant serves the resort which includes a 48 room lodge including a commercial kitchen, Manor House, RV area, and town homes. The facility was referred to enforcement on May 14, 2007, to resolve permit effluent limit violations for TSS (Total Suspended Solids) occurring in December 2006, and January, February, March, and April of 2007, for $CBOD_5$ (Carbonaceous Biochemical Oxygen Demand) in January, March, and April of 2007, Ammonia-N in January and February of 2007, BOD_5 (Biochemical Oxygen Demand) in February of 2007, TKN (Total Kjeldahl Nitrogen) in March and April of 2007, and Total Recoverable Copper in April and September of 2007. The violations addressed within the current Consent Order are reflected in the facility's monthly DMRs from the period of January 2007, to April 2007. The facility has undergone a variety of changes to address compliance issues stemming from these violations. The facility had continued problems establishing a sludge blanket. In addition, past DEQ inspections revealed a number of mechanical deficiencies and maintenance issues including rusted pipes and leaking connections. The facility has been working diligently to improve these maintenance related deficiencies, and all of the maintenance related items noted in the inspections have been remedied. The facility's failure to establish a sludge blanket was more than likely the main factor contributing to the violations addressed by the Consent Order. The facility enlisted the aid of an outside engineering firm to aid the facility in determining why a sludge blanket could not be formed, and how to form one. After these operational suggestions were implemented, the facility was still not able to form a sludge blanket. The failure of the facility to form a sludge blanket appears to have been caused in part by the misinformation given to the staff from the outside engineering firm on how to run the plant. Due to the facility's continued inability to establish a sludge blanket, the facility enlisted the aid of DEQ. A DEQ training operator team met with facility staff on May 2, 2007, and made operational suggestions which the facility has since implemented. The implementation of these operational changes, along with aggressive maintenance and upkeep of the facility, have greatly improved the operation of the facility. The facility has also taken steps to address copper violations. The facility has had a self imposed moratorium on copper for some time. In addition, the facility conducted a source study to determine the locations of the copper, which proved ineffective. Ultimately, the facility has chosen to raise pH to address elevated copper levels and has had no further copper excursions since January 2008. The Consent Order required Leisure Capital to continue to operate the STP in a workman-like manner, and continue to perform routine maintenance and upkeep of the STP in order to produce the best quality effluent of which the STP is capable. In addition, the Consent Order required Leisure Capital to develop a training program for all employees involved in the operation of the Sewage Treatment Plant. The Order also required that the facility would ensure that the operator of the STP remain onsite for the eight hour recommended minimum hour period as recommended by 9 VAC 25-790-300. In the absence of the Class III operator, the operator's assistant shall remain onsite for the recommended eight hour period and the Class III operator shall be available during this time to assist if necessary. Additionally, the Order required the facility to submit to DEQ for review and approval, a written fat, oil, and grease handling and control program which, when approved by DEQ, would be distributed to kitchen staff and implemented immediately. The Consent Order also required the facility to submit to DEQ for approval, an accurate and complete Operation and Maintenance Manual, conduct a sanitary sewer collection system inventory, and submit to DEQ a copper study plan. Finally the Consent Order requires Leisure Capital to conduct ammonia sampling and analysis once per week for one month. All of the items in Appendix A have been successfully completed by the facility. The facility has spent a total of $103,148.79 to come into compliance with Appendix A of the Consent Order. This does not include time spent on in-house labor, or administration and supervision costs. Civil Charge: $10,570

Ennis Paint Inc., Henrico County - Consent Special Order w/ Civil Charges: Ennis Paint, Inc. is a paint manufacturing plant in Henrico County. The facility is subject to the VPDES Permit No. VAR051550. On July 10, 2007, DEQ staff conducted a compliance inspection of the plant. DEQ observed the following violations during the inspection: an unpermitted discharge of water contaminated with paint product from concrete pad to state waters, an unpermitted discharge of wastewater from tank containment area to state waters, Ennis failed to maintain the reports of visual examination of stormwater discharges on-site, and Ennis failed to maintain discharge monitoring reports (DMRs)on-site. The Department issued a Notice of Violation (NOV) to Ennis on September 27, 2007 for these violations. The Consent Order requires Ennis to submit a Corrective Action Plan (CAP), which identifies environmental impacts resulting from the past discharge and contains proposed corrective actions and an implementation schedule. Ennis has spent $168,500 on injunctive relief to date. Civil Charge: $16,197

Mr. Richard Haywood d/b/a Shells Unlimited, Gloucester County - Consent Special Order w/Civil Charges: Ronald T. Sopko owns and Mr. Richard Haywood operates a shellfish processing business named Shells Unlimited (SU), located at 9809 Ditch Bank Road in Gloucester Virginia (Facility). Gloucester Seafood Inc (GSI), a seafood processor, is located adjacent to the Facility. Both properties border a tidal marsh, delineated as jurisdictional wetlands, that flows to Monday Creek. During a recent real estate transaction, the parcel on which the two businesses are located was subdivided, leaving the wastewater pump station and control panel serving both businesses in the possession and control of GSI. Early in October 2007, GSI severed SU's wastewater connection, leaving Mr. Sopko without a means to discharge process and domestic wastewater to the regional wastewater treatment plant. On October 11, 2007, the Gloucester Health Department issued a letter to Mr. Sopko d/b/a/ SU regarding a complaint about a sewage discharge to the marsh. The Health Department investigation revealed that no sewage was being discharged, but there was a discharge from the wash down of the oyster shucking operation. The letter acted as an Emergency Pump and Haul Permit authorizing SU to set up a pump out regime to prevent sewage discharges. On October 16, 2007, DEQ staff investigated reports of an unpermitted discharge of seafood process wastewater from the SU facility to Monday Creek. The facility was not actively discharging at the time of the inspection. Mr. Haywood admitted to discharging the wash down water to the ground at the SU facility. After detailed investigations, neither DEQ nor the Health Department found evidence of fecal contamination in Monday Creek or on the SU site as a result of the discharge. The Facility was shut down entirely on November 9, 2007. On November 15, 2007, the Department issued an NOV to Mr. Haywood citing him for an unauthorized discharge and the failure to report the discharge to DEQ. The Facility reopened on November 27, 2007, after the wastewater connection to the regional treatment system was completed. The cost of injunctive relief was $27,000, and does not include lost revenues from the shut down. Civil Charge: $4,000

Gutterman Iron & Metal Corporation, Norfolk - Consent Special Order with a civil charge: Gutterman Iron & Metal Corporation ("Gutterman") processes scrap metal for recycling. Storm water discharges from the facility are subject to the Permit through Registration No. VAR050351, which was effective July 1, 2004 and expires June 30, 2009. The Permit authorizes Gutterman to discharge to surface waters storm water associated with industrial activity under conditions outlined in the Permit. As part of the Permit, Gutterman is required to provide and comply with a Storm Water Pollution Prevention Plan ("SWP3") for the Gutterman facility. On January 16, 2008, DEQ compliance staff conducted an inspection of the facility that revealed the following: failure to conduct benchmark monitoring for the 2006-2007 reporting period, quarterly visual examinations of storm water quality, quarterly routine inspections, annual comprehensive site compliance evaluations ("CSCEs"), and required training; failure to comply with SWP3 requirements, i.e. failure to provide an updated SWP3, current site map, and a non-storm water certification, and failure to sign and certify the SWP3; and failure include storm event data in the reports of benchmark monitoring for the 2005-2006 and 2007-2008 reporting periods. On April 1, 2008, DEQ issued a Notice of Violation ("NOV") advising Gutterman of the deficiencies revealed during the facility inspection conducted on January 16, 2008. Gutterman responded by letters dated April 8, 2008 and May 5, 2008 to the effect that: a site survey for the preparation of a facility site plan was

underway; the SWP3 was being updated; quarterly visual monitoring of discharges and a facility inspection had been recently conducted; annual training, discharge monitoring (to include reporting of storm event data), and the CSCE would be conducted in the near future; and permit-required informational material was being distributed to scrap suppliers and Gutterman employees. DEQ enforcement and compliance staff met with the facility manager on May 13, 2008 and were informed that Gutterman's long-range plan is to grade and partially pave the facility so that all storm water from the facility will drain to a single outfall (currently there are three permitted outfalls) in which will be installed an oil-water separator, a sediment trap, and technology for removing suspended metals from storm water prior to discharge. The Order requires Gutterman to pay a civil charge within 30 days of the effective date of the Order. Gutterman has addressed all Permit deficiencies, except SWP3 deficiencies, noted above. To ensure compliance with the Permit and the SWP3, and to improve the quality of stormwater discharges from the facility, the Order also requires Gutterman to submit an updated SWP3; to submit documentation of routine inspections, a certification of employee training, and a mitigation plan to reduce the concentrations of suspended solids and recoverable metals in storm-water runoff; and to monitor the discharges from its three permitted outfalls quarterly until completion of the action proposed in the mitigation plan. The Order was executed on August 21, 2008. Civil Charge: $9,116

U.S. Army and Alliant Techsystems, Inc., Radford - Consent Special Order – Issuance: The Radford Army Ammunition Plant is owned by the United States Army and is operated by Alliant Techsystems, Inc. On October 31, 2007, DEQ issued a Notice of Violation ("NOV") to Alliant for effluent limit violations that occurred in July, August, and February 2007. On May 21, 2008, DEQ issued a NOV to Alliant for an effluent limit violation that occurred in March 2008.
March 2008 pH Violation. RAAP explained this violation in a 5-day letter dated March 7, 2008. The incident occurred on March 4, 2008 when low pH wastewater from a sewer junction box leaked into the storm water system that is routed to Outfall 004. The pH violation was discovered by routine monitoring at 6:15 PM. The pH at the outfall was successfully adjusted with soda ash by 8:45 PM. The junction box was repaired on March 7, 2008. July 2007 pH Violations. Alliant first explained the July 2007 pH violations in a 5-day letter dated August 2, 2007. That letter stated that a release caused by a rupture of an expansion joint in the acid area was transported via a storm drain into the Outfall 006 sewer line. An alarm at Outfall 006 alerted an operator to the drop in pH. Alliant personnel treated the spill area and the flow in the sewer line with soda ash. Overtreatment resulted in a short-term pH spike of 9.8. Alliant has recently completed grouting the floor of the building in which the release occurred. The new grouting is expected to prevent releases to the storm water system originating from spills inside the building. Alliant followed up with a letter dated December 27, 2007 regarding Outfall 006 and the acid area. That letter further explained planned and completed repairs and renovations in the acid area and the procedural changes that have been made to prevent or respond to any future acid releases. The letter also stated that the period when effluent pH was less than 6 during the acid release in July 2007 was limited to approximately six minutes. During that release, the average receiving stream flow was 1,189 MGD and the outfall flow was 11.4 MGD (which represents less than one percent of the receiving stream flow). Alliant staff also explained that due to its age, a complete renovation of the acid area at a cost of $23 million had already been planned (not in response to the pH incidents). This renovation will incidentally improve secondary containment of any acid spills. August 2007 pH Violation. Alliant explained the August 2007 pH violation in a 5-day letter dated August 15, 2007. That letter indicated that the exceedance lasted for five minutes. Although potential sources of alkalinity were investigated, no cause for the violation has been determined. Jan. & Feb. BOD_5 and COD Violations. At a meeting with DEQ staff on December 4, 2007, RAAP staff explained that the BOD_5 and COD violations in January and February 2007 were due to errors in operation of a distillation column. In response to these problems, Alliant changed the operating procedures for the column, replaced a level controller for the column, changed to a monitoring method that instantaneously measures total carbon in-stream in order to provide more time to respond to spikes in carbon, and retrained the operators on the new equipment and procedures. On December 8, 2006, DEQ issued a Warning Letter to Alliant for effluent limit violations that occurred in October 2006. Oct. 2006 pH Violations at Outfall 007. In a 5-day letter dated October

18, 2006 and an e-mail dated January 2, 2008 regarding pH violations at Outfall 007 on October 17, 2006, Alliant explained that operator error resulted in a pH concentration maximum violation, followed immediately by a pH concentration minimum violation caused by overcorrection of the pH exceedance. The duration of both violations was brief. The Order before the Board includes a civil charge of $7,700.00 for the violations listed above. There is no injunctive relief because the short-term actions that could prevent future violations have already taken place. The long-term action that is most likely to reduce the potential for future acid releases is the multi-million dollar renovation of the acid area referenced above. That project was planned and budgeted before the violations addressed in the Order occurred and is proceeding independently of this enforcement action. Civil Charge: $7,700

Dixon Lumber Company, Incorporated, Wythe County - Issuance of a new Consent Special Order with Civil Charges, which cancels and supercedes the Consent Special Order issued on June 3, 1994 and amended on March 17, 1999: Dixon Lumber Company, Incorporated ("Dixon Lumber") entered into a Special Order by Consent with the State Water Control Board on June 3, 1994 for removal of a limestone tailings pile located at Dixon Lumber's Austin Meadows site, near Austinville, in Wythe County. That Order, which required removal of the tailings pile by June 1, 1999, was amended in 1999, extending the date for complete removal of the tailings pile until June 1, 2008. Dixon Lumber has requested that DEQ extend the completion date for removal of the limestone tailings pile from June 1, 2008 until June 1, 2015. Dixon Lumber did not generate the limestone tailings pile, but purchased the property on which the tailings pile existed. Dixon Lumber's contractor has experienced numerous problems in removing the tailings due to wet weather, sunken equipment, chemistry of the product and market demand for the limestone as a soil additive. However, the contractor has made a commitment of resources in the form of equipment purchases, and in ditching to "decant" and decrease moisture levels within the tailings pile. An increased rate of removal of the tailings pile has occurred within the last two years. Approximately one half (reported as 253,439 tons) of the originally estimated 500,000 tons of material has been removed. Also, the original estimate of the size of the pile may not have fully captured the total amount of tailings on the site. Dixon Lumber is current with all monitoring and reporting requirements contained in the amended 1994 Order but has violated the date for completion of the removal action. Quarterly monitoring for both total recoverable and dissolved zinc show continued violations of the water quality standard for zinc. The proposed Consent Special Order carries forward requirements for quarterly water quality monitoring and reporting, submittal of annual progress reports, and installation and maintenance of erosion and sedimentation controls during removal of the tailings pile. Dixon Lumber is required to conduct an engineering study to determine the amount of tailings pile that must remain on-site to insure stabilization of State Route 69, located at the north end of the Austin Meadows site, and a private pond on an adjacent property immediately east of the site. This study will include recommendations for stabilization of all outslopes for final restoration of all areas of limestone tailings removal, and a proposal for final establishment and restoration of the stream channel of Buddle Branch. The Engineering Study must be conducted and a report with the referenced recommendations submitted to DEQ for review and approval no later than June 1, 2011. Upon approval, implementation of the recommendations shall become a part of and enforceable under the terms of this order. This Order requires complete removal of tailings pile by June 1, 2015. The present cost estimate for these activities is $350,000.00 Civil Charge: $16,109

Town of Elkton, Rockingham County - Consent Special Order with a civil charge: The Town of Elkton (the Town) owns and operates the Facility located in Rockingham County, Virginia, which serves the Town's population of approximately 2,042. The Facility is subject to the Permit which authorizes the discharge of treated wastewater to the South Fork Shenandoah River in strict compliance with the terms and conditions of the Permit. The design capacity of the Facility has been rated and approved as 0.4 MGD. On January 5, 2008, DEQ conducted an inspection of the Facility in response to a pollution complaint. DEQ staff observed numerous operational and maintenance and monitoring/reporting problems at the Facility during the January 5th inspection. The inspection report, dated January 15, 2008, recorded staff observations and documents the Facility's problems, including:

a. Staff review of the Facility's records showed that the Town experienced unauthorized discharges of solids/unusual discharges from the clarifiers on December 10, and December 22 through approximately December 29, 2007, in violation of Permit Part II.F.;
b. Staff review of the Facility's and DEQ records showed that the Town failed to report the unusual discharges on December 10, and December 22 through approximately December 29, 2007 within 24 hours, in violation of Permit Parts II.G. and II.H.;
c. Staff observed the intentional bypass of wastewater from an idle aeration basin (being operated as an anaerobic digester) around further treatment units, including no disinfection, and noted the failure to notify DEQ about previous intentional bypasses that were acknowledged by the operator, in violation of Permit Part II.U.3.;
d. Staff observed that the north aeration basin has been operated for the past year as an anaerobic digester, which is not in accordance with the approved O&M Manual for the Facility, in violation of Permit Part II.Q.;
e. Facility records showed that during the unusual discharges of December 10, and December 22 through December 29, 2007, unlicensed plant operators made and executed operational decisions without contacting the licensed operator, although a Class III license is required for operational decisions at the Facility, in violation of Permit Part I.F.8.;
f. Staff's review of Facility documents showed that the Town had not been monitoring E. coli in the effluent as required by the Permit, in violation of Permit Part I.A.1.;
g. Staff's review of Facility records showed that the Town has failed to perform a survey of significant commercial users, in violation of Permit Part I.D.2.;
h. Staff observed that the Town constructed and was operating UV treatment units without obtaining a Certificate to Construct or Certificate to Operate, in violation of Permit Part I.F.5.; and
i. Staff's review of the Facility's records showed the improper reporting of monitoring data, in violation of Permit Part II.Q. and Part II. U.3.

DEQ issued a NOV on February 8, 2008, to the Town for unauthorized discharges of solids on December 10, and December 22 through December 29, 2007, January 5, and February 7, 2008; the unauthorized bypass of treatment units, including disinfection, on January 5, 2008; various O&M problems; failure to perform an industrial survey; and failure to properly monitor E. coli in violation of Permit requirements as noted above in Paragraph 3 and Virginia Code § 62.1-44.5 and the Permit Regulation 9 VAC 25-31-50 A. On February 20, 2008, DEQ met with representatives of the Town to discuss the apparent violations cited in the NOV and resolution of those violations. During the February 20 meeting, DEQ requested the Town submit a plan and schedule to address the issues at the Facility. Also, during the meeting the Town informed DEQ that its chief operator had been dismissed for failing to properly operate and maintain the Facility. On March 24, 2008, DEQ received the Town's plan and schedule of corrective actions to address the Facility's problems. Sections of this plan and schedule have been incorporated into Appendix A of this Order. DEQ issued a NOV on April 3, 2008, to the Town for exceedances of the Permit's BOD and TSS effluent limitations during February 2008, unauthorized discharges of solids on February 7, 11, 13,16, and 23, 2008, and failure to submit the Water Quality Standards (once per 5 years) monitoring as required by the Permit. DEQ issued a NOV on May 6, 2008, to the Town for exceedances of the Permit's BOD, TSS and E. coli effluent limitations during March 2008, unauthorized discharges of solids on March 1, 2, 5, 6 and 9, 2008, and again failing to submit the Water Quality Standards (once per 5 years) monitoring as required by the Permit. At the times noted above, the Town was discharging sewage to state waters and, therefore, violated the Va. Code, the Regulation and the Permit by failing to comply with Permit conditions at the time of said discharges. The proposed Order, signed by the Town on July 9, 2008, requires the Town to upgrade the sewage treatment plant to meet final effluent limitations, develop an I&I plan or corrective actions and pay a civil charge to resolve the violations. Civil Charge: $16,170

City of Winchester - Percy D. Miller Water Treatment Plant, The City of Winchester, Frederick County - Consent Special Order with a civil charge: The City of Winchester (the City) owns and operates the Percy D. Miller Water Treatment Plant (WTP) serving the City in Frederick County, Virginia, which is the subject of the Permit. The Permit authorizes the discharge of treated wastewater (primarily treated backwash water from the water treatment process) to an unnamed tributary to the North Fork of the Shenandoah River, in strict compliance with the terms and conditions of the Permit. On August 17, 2007, DEQ received and investigated a pollution complaint regarding a reddish sludge discharge (and possible fish kill) in the unnamed tributary to which the WTP discharges. DEQ staff observed reddish sludge in a stream reach of approximately 1.5 miles downstream from the WTP and traced the sludge upstream to the WTP, but did not observe any dead fish. On August 20, 2007, DEQ staff continued the investigation and observed the reddish sludge at a number of locations downstream of the WTP. The WTP staff interviewed by DEQ apparently were unaware of a sludge/solids discharge. In addition to being the source of the reddish discharge, DEQ staff observed a number of O&M problems at the WTP, including:

a. significant leakage from the wastewater lagoon gate valves,
b. apparent failure to submit quarterly groundwater monitoring reports as required by the Permit, and
c. failure to monitor the WTP's sewage treatment plant's Outfall 101 discharges.

DEQ's investigation indicated that the solids release was primarily due to improper operations of the WTP attributed to WTP staff apparently not adequately or properly monitoring the decant operations to ensure that solids were not discharged, allowing a significant release of solids to the receiving stream. Although the Permit allows the discharge of suspended solids in amounts not to exceed 30 or 45 mg/l, the sludge observed in the stream indicated discharges of solids far in excess of those amounts. DEQ staff also observed an almost continuous leakage from the treatment lagoon outlet structure's gate valves (three gate valves at different elevations). While the leakage was severe, the WTP staff did not consider this leakage to be an unauthorized discharge and, therefore, did not conduct appropriate monitoring and did not report the leakage to DEQ. Lagoon solids were also lost through this gate valve leakage. DEQ issued a NOV on September 25, 2007, to the City for unauthorized discharge of solids to State waters, failure to report the unauthorized discharge, failure to comply with the reporting requirements of the Groundwater Monitoring Plan and failure to operate the WTP in accordance with the O&M Manual. On October 11, 2007, DEQ met with representatives of the City in an informal conference to discuss the NOV and the need for a plan and schedule of corrective action. On November 1, 2007, WTP personnel notified DEQ of an unauthorized discharge of solids from the WTP. On November 2, 2007, DEQ conducted an investigation of the solids spill to the receiving stream. DEQ staff noted reddish sludge in the WTP's discharge channel and the receiving stream. In addition, the WTP personnel provided DEQ staff with sample results of the Outfall 002 discharge, which demonstrated a Total Residual Chlorine (TRC) Permit effluent limitation violation. This unauthorized discharge of solids was attributed to sediment basin cleanout operations which stirred up solids in the settling lagoon receiving those wastewaters and solids discharged through the leaking gate valves. By submittals dated November 8, 2007 and January 9, 2008, the City provided a written plan and schedule of corrective actions to prevent further unpermitted discharges, address the O&M problems, and ensure compliance with the Permit. DEQ issued a NOV on January 10, 2008, to the City for an unauthorized discharge of solids to State waters and for a TRC effluent violation at Outfall 002. The proposed Order, signed by the City on June 11, 2008, requires the City to repair the leaking gate valves, address O&M issues at the WTP, train staff in proper O&M procedures, follow the requirements of the Groundwater Monitoring Plan, comply with TRC Permit effluent limits, install onsite sewage treatment equipment, and pay a civil charge. Civil Charge: $17,520

Dismal Swamp Properties, LLC, Suffolk - Consent Special Order with a civil charge: Dismal Swamp Properties, LLC ("Dismal Swamp Properties") owns property consisting of 171.8 acres situated on Portsmouth Boulevard (US Highways 13/58/460) in Suffolk, Virginia. The property had been used by a previous owner to conduct logging operations. A logging road, a drainage ditch and a network of logging skid trails were reportedly present on the property when it was acquired by Dismal Swamp

Properties. A construction inspector from the City of Suffolk reported to DEQ possible unauthorized wetlands impacts on the property. DEQ compliance staff ("staff') conducted a site inspection on October 22, 2007 and observed that additional roads, ditches and clearings had been constructed on the property. Staff observed the absence of woody vegetation, the presence of wheel ruts and tire tracks on 1.2 miles of newly constructed road corridors; a newly excavated ditch; the extension by excavation of the existing drainage ditch; and piles of side-cast material, including large woody debris, uprooted trees, detritus and soil in several locations along the sides of the newly constructed road corridors, the two newly excavated ditches, two areas that had been cleared of vegetation, and five existing logging skid trails that had been cleared of trees and other vegetation. Staff estimated that about 4.4 acres of forested wetlands had been impacted. A review of DEQ files did not find a Virginia Water Protection ("VWP") permit issued for wetland impacts on the property. On October 31, 2007, DEQ issued a Notice of Violation ("NOV") for impacting wetlands without a VWP permit. In response, Dismal Swamp Properties stated that the Property was being prepared for use as a hunting preserve and that the only work that had been done on the Property was the routine maintenance of existing logging roads and ditches and the removal from existing roads of trees that had fallen during Hurricane Isabel in September 2003. In the Order, Dismal Swamp Properties acknowledges that its activities were not exempt from VWP permitting requirements as it was not using the property for silviculture operations; likewise, the construction, maintenance and excavation had not been done within a reasonable time after the hurricane damage had occurred and, in any event, changed the character, scope and size of the pre-existing roads, trails and ditches. Dismal Swamp Properties completed a wetland delineation dated February 29, 2008, which it submitted to the United States Army Corps of Engineers ("ACOE") for confirmation on March 25, 2008. With the exception of the main logging road and the property boundary along the US Highways 13/58/460 right-of-way, the entire property is a wetland. The Order would require Dismal Swamp Properties to pay a civil charge within 30 days of the effective date of the Order. The Order would also require Dismal Swamp Properties, within 60 days of receiving ACOE's wetland confirmation, to submit a plan to remove all fill material from delineated wetlands and to restore wetlands impacted by the construction of the new road corridors, excavation of the two ditches, and the clearing of land and the logging skid trails. The Order also gives Dismal Swamp Properties the option to submit a Joint Permit Application ("JPA") to permanently impact some or all of the previously disturbed wetlands. The JPA must conform to VWP permit regulations, including mitigation and restoration requirements. The Order was executed on August 27, 2008. Civil Charge: $16,380

The City of Newport News - Consent Special Order with Civil Charge: The City of Newport News-Department of Public Works ("City") owns a parcel approximately 48 acres in size ("parcel") located at 513 Oyster Point Road in the City of Newport News. The parcel consists of uplands as well as non-tidal forested, scrub-shrub, and emergent wetlands. Deep Creek ("creek") is a non-tidal tributary to the Warwick River and it traverses the parcel. On January 8, 2007 DEQ TRO Virginia Water Protection ("VWP") compliance staff ("staff") observed the parcel with one apparent constructed access path, approximately 15 feet wide, through non-tidal forested wetlands on the parcel. Additionally, DEQ staff observed broken, crushed, and uprooted herbaceous, scrub-shrub and forested wetland vegetation, woody debris piles several feet high, piles of soil, and apparent machine-made ruts which contained tire imprints and standing water in wetlands on the parcel. Staff estimated the total area of wetlands impacts to be approximately 0.5 acres. DEQ files did not show a wetlands permit application or VWP permit authorizing impacts to wetlands on the parcel. On March 9, 2007 the U.S. Army Corps of Engineers conducted a wetland delineation and confirmed that approximately 0.5 acres of wetlands had been impacted. Reportedly, the impacts to wetlands on the parcel occurred when the access path was constructed by City staff from a City-owned maintenance yard on the parcel to allow mechanized equipment to remove downed trees from the creek. One piece of mechanized equipment became stuck in the wetlands area, and larger equipment used to remove the stuck equipment had added to the wetlands impacts. The order requires payment of a civil charge and submittal of a restoration and monitoring plan and schedule for the 0.5 acres of impacted wetlands on the property. The order was executed on August 21, 2008. Civil Charge: $7,000

Mr. and Mrs. Christoforo Russo, Hampton - Consent Special Order with Civil Charge: Mr. and Mrs. Christoforo Russo own the subject property located at 2845 North Armistead Avenue in Hampton, Virginia. The 10.78 acre property consists of uplands as well as nontidal forested wetlands that connect to the Southwest Branch of the Back River and thereby the Back River and the Chesapeake Bay, state waters of the Commonwealth of Virginia. On March 20, 2008 DEQ staff was contacted by City of Hampton staff regarding a potential wetland violation on the property. On that date DEQ staff met City of Hampton staff at the property to investigate the potential violation. DEQ staff observed an approximately 3.5 acre area of fill material at the property, later determined to have impacted 1.7 acres of non-tidal forested wetlands. The fill material appeared to be approximately three feet high and consisted of soil, gravel, stumps, concrete rubble, cut trees, and woody debris. A tracked excavator was parked within the filled area. Areas adjacent to the western and southern side of the fill material exhibited typical undisturbed canopy and understory vegetation. The majority of the trees within the filled wetland area were dead and many appeared to have had their limbs removed. There was no typical scrub-shrub wetland understory in the filled wetland area. Mr. and Mrs. Russo do not have a Virginia Water Protection Permit authorizing the fill activity on the property. On May 30, 2008 DEQ issued Notice of Violation No. 2008-05-T-001 to Mr. and Mrs. Christoforo Russo, advising of the above listed facts and applicable regulatory citations. The order requires payment of a civil charge, submittal of an approvable preservation and restoration plan and implementation schedule, and implementation of the plan upon approval by DEQ. The order was executed on August 18, 2008. Civil Charge: $10,400

Black Stallion, LLC., Stanardsville, Greene County - Consent Special Order w/ Civil Charges: Black Stallion, LLC owns an underground storage tank (UST) facility located at 8257 Spotswood Trail, Stanardsville, Virginia. The owner stores petroleum in these USTs under the requirements of 9 VAC 25-580-10 *et seq.* Underground Storage Tanks: Technical Standards and Corrective Action Requirements and 9 VAC 25-590-10 *et seq.* Petroleum Underground Storage Tank Financial Responsibility Requirements (collectively, the UST Regulation). The UST Regulations require that owners of UST facilities clean up any petroleum releases from USTs, protect the USTs from corrosion, perform release detection, properly register the USTs, properly close non-compliant USTs, and maintain both compliance records and financial responsibility for the USTs. Inspections of the facility on September 21 and 24, 2007, revealed an ongoing petroleum release from the USTs and a number of alleged violations of the UST Regulation, respectively. Alleged violations noted relevant to this Consent Special Order are failure to: 1) maintain release detection records for the piping associated with UST numbers 1, 2 and 3; and 2) report a suspected release of petroleum from the USTs when release detection monitoring alarms had been activated. DEQ issued a Notice of Violation (NOV) to the owner on September 26, 2007 and a confirmed release letter on October 3, 2007. The owner responded by meeting with DEQ staff at the facility on November 1, 2007, to discuss resolution of the violations. DEQ staff met with the owner in December 2007 and January 2008 to review laboratory analysis and potential clean-up plans for the release. Numerous conference calls were also held with the owner, its contractor and DEQ staff throughout March, April, May, June and July 2008 to discuss a proposed Corrective Action Plan (CAP). A CAP was approved by DEQ on July 16, 2008 and implemented by the owner on August 24, 2008. The owner signed a Consent Special Order on August 4, 2008. The owner failed to respond to release detection alarms for the secondary containment sumps for the USTs and piping. The release occurred due to a piping failure. The owner ceased refueling operations, replaced the defective piping and hired a contractor to remediate the released petroleum. However, performance of the site assessment and remediation of the release progressed more slowly, though both the owner and their contractor communicated routinely with DEQ staff to install and sample both wells and surface waters and to design a remediation system to clean up the remaining petroleum in the groundwater. Since the commencement of this enforcement action, performance has improved significantly. Appendix A of the Order requires implementation of the approved CAP. The CAP includes remediation of the groundwater, routine sampling and reporting, and compliance with DEQ directives during the implementation of the CAP. Civil Charge: $35,100

Snow Family, LLC., Dyke, Greene County - Consent Special Order w/Civil Charges: Snow Family, LLC owns an underground storage tank (UST) facility located at 8609 Dyke Road, Dyke, Virginia. The owner stores petroleum in these USTs under the requirements of 9 VAC 25-580-10 *et seq.* Underground Storage Tanks: Technical Standards and Corrective Action Requirements and 9 VAC 25-590-10 *et seq.* Petroleum Underground Storage Tank Financial Responsibility Requirements (collectively, the UST Regulation). The UST Regulation requires that owners of UST facilities protect USTs from corrosion, perform release detection, properly register the USTs, properly close non-compliant USTs, and maintain compliance records for DEQ review. A November 7, 2006, inspection of the facility revealed a number of alleged violations. Alleged violations noted relevant to this Consent Special Order are failure to: 1) perform release detection on UST numbers 1 & 2; 2) protect UST number 1 from corrosion; and 3) maintain documentation of financial responsibility for the facility. DEQ issued a Notice of Violation (NOV) to the owner on October 22, 2007. The owner responded by meeting with DEQ staff on December 17, 2007, to discuss resolution of the violations. DEQ staff received copies of two separate test results for the corrosion protection system for the USTs, performed on August 31, 2007 and October 13, 2007. The tests indicated passing results for UST #2 and failing results for UST #1. DEQ also received copies of a signed contract for the performance of release detection for both USTs. On February 28, 2008, the owner submitted documentation confirming that UST #1 was protected from corrosion, and on June 24, 2008, the owner submitted acceptable financial responsibility documentation to DEQ. Submittal of these documents resolved two of the alleged violations stated in the NOV. In order to resolve the past and continuing alleged violation of failure to perform release detection for both USTs, the owner signed a Consent Special Order on August 12, 2008. In order to confirm continuing compliance with the requirements for release detection, the owner has submitted passing release detection records for the months of May, June and July 2008, in accordance with Appendix A of the Order. Appendix A also requires that the owner submit release detection records for the months of August and September 2008. All other alleged violations were resolved prior to signing the Order. The cost to resolve the alleged violations was approximately $2,759. Civil Charge: $8,673

Baltimore Tank Lines, Inc., Alexandria - Consent Special Order with Civil Charges – Issuance: Baltimore Tank Lines, Inc. owns and operates a trucking company that delivers fuel oil to customers including Mirant Potomac River Generating Station ("Mirant") located in Alexandria, VA. On February 19, 2008, DEQ-NRO received notification from the Virginia Department of Emergency Management Emergency Operations Control Center, that a release of fuel oil from a Baltimore tanker occurred at Mirant. DEQ-NRO staff arrived at the Mirant facility and were advised by Mirant personnel that a tanker owned by Baltimore Tank Lines and delivering 7500 gallons of No.2 fuel oil struck a solid waste dumpster while driving in reverse. Law enforcement personnel also arrived at the scene and did not issue any citations to the driver. The driver did take steps to ensure that the tanker could be backed up safely, including having a Mirant employee direct him while in reverse. The impact ruptured the tanker, resulting in the release of approximately 6,000 gallons of fuel oil to the ground. A portion of the released fuel did enter storm drain inlets located on Mirant property, and the fuel did enter the Potomac River. Mirant personnel instructed the tanker driver to move the ruptured tanker into the facility's coal pile area, which contained the leaking oil within a concrete bermed area. In addition, oil spill response personnel placed booms in the Potomac River and storm drains to contain the oil and used vacuum trucks to recover oil. Affected storm drains were also protected by using absorbent materials to create dikes. As a result of these actions, approximately 5,273 gallons of free product was recovered, not accounting for oil captured within solid material. Mirant submitted a report to DEQ on April 1, 2008 describing the event. The report details the foregoing and indicates that the Mirant facility was taken offline in order to prevent additional oil from reaching the Potomac River. The facility resumed operations on February 21, 2008 after Mirant determined there would be no additional discharge of oil to the water. DEQ-NRO contacted the President of Baltimore Tank Lines, Inc. on March 11, 2008 to discuss the events of February 19, 2008. DEQ-NRO requested that Baltimore Tank Lines, Inc. submit the corporation's spill prevention and spill response procedures. On March 19, 2008 the President of Baltimore Tank Lines, Inc. submitted Baltimore's handbook, which per the President, is issued to all company drivers and owner operators that

are employed by Baltimore Tank Lines, Inc.. The manual did set forth spill prevention and spill response procedures that must be followed by company drivers. DEQ-NRO issued a Notice of Violation to Baltimore Tank Lines, Inc. on March 7, 2008 citing a violation of VA Code § 62.1-44.34:18 for discharging oil onto state waters, lands, or storm drains. In addition, the United States Coast Guard investigated the spill and issued a Notice of Violation to Baltimore Tank Lines for discharging an estimated 30 gallons of diesel into the Potomac River. A penalty of $125.00 was also assessed. The Consent Special Order is a penalty only Order which requires Baltimore Tank Lines, Inc. to pay $4,200.00. It is estimated that Mirant has spent $118,738 to clean up the spill. This cost includes material costs, vendor costs, emergency response costs, and costs associated with personnel time allocated to the clean up. Civil Charge: $4,200

Development of Virginia's FY 2009 Clean Water Revolving Loan Funding List: Purpose: Title VI of the Clean Water Act requires the yearly submission of a Project Priority List and an Intended Use Plan in conjunction with Virginia's Clean Water Revolving Loan Fund (VCWRLF) Federal Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the Board to establish to whom loans are made, loan amounts, and repayment terms. In order to begin the process, the Board needs to consider its FY 2009 loan requests, tentatively adopt a FY 2009 Project Priority List based on anticipated funding, and authorize the staff to receive public comments.

Applications Received: On May 30, 2008 the staff solicited applications from the Commonwealth's localities and wastewater authorities as well as potential land conservation applicants and Brownfield remediation clientele. July 18, 2008 was established as the deadline for receiving applications. Based on this solicitation, DEQ received twenty-four (24) wastewater improvement applications requesting $380,307,128 and two Brownfield applications for $2,304,725 in loan assistance.

Funding Availability for FY 2009: The federal appropriation for the nation's Clean Water State Revolving Funds for FY 2009 has not been approved yet but Virginia's share is expected to be in the range of $14-24 million. State matching appropriations, along with the accumulation of monies through loan repayments, interest earnings, and de-allocations from leverage accounts should make an additional $60+ million available for funding new projects. These funds, in accumulation, will result in approximately $80 million becoming available during the 2009 funding cycle. Based on the large amount of applications received relative to available resources, it will be necessary to leverage the Fund again this year. Through leveraging, available cash is placed in a debt service reserve account, and is leveraged on the bond market to create additional funds for projects.

In anticipation of the continued high demand for VCWRLF funding due to the nutrient removal upgrades required for restoration of the Chesapeake Bay, we have met many times with the Virginia Resources Authority and their financial advisors regarding the funding capacity of the program and the ability of the Fund to meet this anticipated demand. From these detailed discussions, a capacity model of the Fund has been developed and analyzed. Results of this analysis indicates that, through the aggressive use of leveraging, the VCWRLF could provide funding in the range of $250 million over the next couple of years and still be sustainable to meet anticipated demand into the future.

The staff believes it is prudent to move forward with the initial targeting of Virginia's proposed FY 2009 clean water revolving loan funding list based on the results of this capacity evaluation and the maximum utilization of the Fund. Final Board approval of the list will not be requested until December.

Application Evaluation: All 24 wastewater applications were evaluated in accordance with the program's "Funding Distribution Criteria" and the Board's "Bypass Procedures". In keeping with the program objectives and funding prioritization criteria, the staff reviewed project type and impact on state waters, the locality's compliance history and fiscal stress, and the project's readiness-to-proceed. All the wastewater applications were determined to be eligible and provide direct benefits to water quality.

The **HRRSA North River STP** project is under construction and has been funded through previous funding cycles. Subsequent to receipt of their 2009 application, additional 2008 leverage funds were provided to HRRSA that fully satisfied this current request so additional funding is no longer needed. Also, funding within an existing **City of Norfolk** loan has been used to address three of the projects included in their current application, reducing their new loan need down to $7,500,000.

In the interest of assisting the maximum number of applicants with Fund resources, we looked closely at the larger projects with multi-year construction schedules that could be successfully funded in phases. Staff determined that six of the applicants (**City of Richmond, HRSD/James River STP, Alexandria Sanitation Authority, Arlington County, Rivanna Water and Sewer Authority, and the Town of Berryville**) could be partially funded to meet cash flow needs without disrupting construction schedules, allowing all local government applicants to be addressed this year.

The two Brownfield remediation applications were reviewed with Waste Division staff at DEQ. It was verified that the **BET Salem Ventures** project was approved and would provide water quality benefits but that the **Peck Company** project was still being evaluated by EPA and was not ready to proceed.

The funding list and associated recommendations are based on the best information and assumptions currently available to staff from the applications received and discussions with DEQ and the Virginia Resources Authority. A number of activities will be occurring over the next several months to help clarify these factors including the following: (1) DEQ will hold individual meetings with targeted recipients to verify the information in the applications, especially schedules; (2) negotiations between loan recipients and DEQ Chesapeake Bay Program staff regarding Water Quality Improvement Fund grants to associated loan recipients will better determine the local share loan needs of many of the 2009 applicants; and (3) finalization of the federal budget for 2009 will determine the federal appropriation for the Clean Water SRF. The staff is recommending that the list be tentatively adopted, subject to the verification of information in the loan applications (especially schedules) and the availability of funds from the federal appropriations and the 2009 leverage.

Conclusion: The VCWRLF program solicited applications for FY 2009 funding assistance and evaluated 26 requests totaling $382,611,853. After an evaluation of funding availability, priority consideration, the review of anticipated construction schedules, and projected cash flow needs, Virginia's FY 2009 Project Priority List includes 24 projects totaling $258,703,432. Based on current and projected cash resources, including the additional funds that can be made available through leveraging, the Board should have sufficient funds available to honor these requests at the amounts shown through a leveraged loan program. The staff believes that this will satisfy the cash flow needs for all of the applications received that are ready to proceed.

Staff Recommendations: The staff recommends that the Board target the following localities for loan assistance, subject to the verification of the information in the loan applications (especially schedules) and the availability of funds, and authorize the staff to present the Board's proposed FY 2009 loan funding list for public comment.

1	City Of Waynesboro	$16,531,255
2	City of Lynchburg	$14,000,000
3	Frederick-Winchester SA	$20,535,000
4	City of Richmond	$10,000,000
5	City of Galax	$1,408,000
6	HRSD/James River STP	$10,000,000
7	HRSD/Nansemond STP	$23,619,220
8	Alexandria SA	$3,500,000
9	City of Norfolk	$7,500,000
10	Arlington County	$35,000,000
11	Stafford County	$24,163,010
12	Rivanna WSA	$20,000,000
13	Augusta County SA	$10,345,526
14	City of Falls Church	$4,100,000
15	HRSD/Interceptor Metering	$24,237,250
16	City of Salem	$7,488,600
17	Town of Berryville	$8,000,000
18	Alleghany County	$4,518,316

19	Town of Elkton	$3,490,000
20	City of Norton	$1,514,370
21	Nelson County SA	$52,885
22	Town of Lovettsville	$2,500,000
23	City of Newport News	$5,200,000
24`	BET Wilkinson Salem Venture, LLC	1,000,000
	Total Proposed 2009 Funding	$258,703,432